5/83 S0320-1 A

MAY 1983

ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska

1 Characteristics of Alaska's Labor Force

7 Construction Employment Outlook

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Bureau of Labor Statistics
U.S. Department of Labor

Employment and Training Administration
U.S. Department of Labor

May 1983
Volume 3
Issue 5

Alaska Economic Trends is published monthly by the Alaska Department of Labor, Research & Analysis Section, P.O. Box 1149, Juneau, Alaska 99802.

POSTMASTER: Send address change to ALASKA ECONOMIC TRENDS, P.O. BOX 1149, Juneau, Alaska 99802.

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CHARACTERISTICS OF ALASKA'S LABOR FORCE BY SEX AND RACE

By Neal Fried

Labor Force by Sex

Alaska's civilian labor force is 58% male and 42% female, closely mirroring the rest of the nation. In 1970 the composition of the civilian labor force was 61% male and 39% female. In 1980, within Alaska the female share varied from a high of 70% female in Juneau to a low of 40% in the Wade Hampton census area. This reflects a difference in job opportunities, age variation and different cultures and attitudes. Juneau is a large community with a variety of stable, fulltime, year-round jobs. Many of the jobs found in Juneau have a high concentration of women. In the Wade Hampton census division, employment opportunities are scarce and a large percentage of the few job opportunities that do exist are in areas that traditionally have been dominated by males (such as construction). This relationship in most cases reflects the difference between the rural and urban areas of the state.

Female participation1/ in the labor force has brought about the most dynamic changes in the labor force over the past decade. In Alaska, women's participation in the labor force has grown by 19 percentage points over the decade. Presently 60% of Alaska's women of working age (over 16) are active in the labor market. This is a full 10 percentage points above the national average and it is the second highest in the country (Nevada is the highest at 61%). This high participation of women is also reflected by the fact that Alaska has the highest percentage of families with 2 or more wage earners (64%)in the nation. The increasing participation of women in the labor force has been a nationwide phenomenon. Attitudes about women working have changed, birth rates have decreased, women have been acquiring more education, more part-time work has become available and job discrimination has been easing.

As in the composition of the labor force, the female participation rates differ from one area of the state to another. The areas with the highest participation rates are generally the urban areas where ample job opportunities exist. In Juneau a full 71% of working age women are in the labor force, nearly equal to the state's labor force participation rate. In Anchorage, the participation rate stands at 65%. At the lower end, one

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1/ When labor force participation is discussed, the uniformed military is included. When the military is not included it will be referred to as the civilian labor force.

generally finds the rural areas of the state such as Bethel and Wade Hampton census areas having female participation rates of 42% and 40%. This lower participation is not limited to women but is reflected in the male participation rate also (particularly Alaskan Natives). This is largely a result of the lack of jobs in these areas along with other factors that will be discussed further.

The state's female unemployment rate of 8.1% was below the male rate of 11%. The male rate is higher than the female rate largely because seasonal industries (such as construction) experience a high rate of unemployment and are dominated by males. There are a few areas in the state where the reverse is true. In Kodiak and Kenai, for example, fish processors employ large numbers of women and it is an extremely seasonal industry. The nation's experience is different than the state's, with the female unemployment rate being higher than the male rate.

Labor Force by Race and Ethnic Origin

In the printed publications from the 1970 census covering employment statistics, only the races white and black are segregated out for detail information. In addition there is a category "persons of Spanish language" which was derived from the answers to a question on a person's origin or descent. This means few comparisons can be made between many of the racial groups from the 1970 census and those identified in the 1980 census.

The minority share of the civilian labor force was 17% in 1980 compared to 14% in 1970. Some of the increase shown in 1980 may be the result of more people being identified as having Spanish origins who were counted as white in the 1970 census. The largest group, other than white, is Native Alaskan with 11% of the civilian labor force, followed by black (2.8%), Asian and Pacific Islander (2.2%) and Spanish origin (1.9%). Though no directly comparable information is available from the 1970 census, it appears the Asian and Pacific Islander group has grown the most rapidly over the decade. Within the state the race/ethnic makeup of the civilian labor force varies considerably. For example, in Anchorage 88% of the civilian labor force is white, followed by black with 4.4%. In comparison, Bethel's labor force is 66% Native and 33% white. Kodiak's civilian labor force has one of the more racially diverse labor forces with 72% white, 12% Native, 11% Asian and Pacific Islander, and .5% black. In addition 4% of the labor force indicated they were of Spanish origin.

The group with the lowest unemployment rate is the Asian and Pacific Islander at 6.5%, a full 3 percentage points below the overall rate. The white rate (8.2%) is the only other rate below the average. All other groups experienced higher jobless rates than the average. The Native Alaskan group experienced the highest jobless rate (20.3%), double the average, with all other rates falling in between. The higher rates experienced by many of the groups may be a result of few marketable skills, language difficulties, and cultural differences. In the Native Alaskan case this is compounded by the fact that a large percentage of the Native labor force is found in rural areas where job opportunities are less plentiful. The unemployment rate may not always be an appropriate tool to measure their success or lack thereof in the labor force because subsistence is not accounted for in these statistics though it is a form of employment.

All groups except Native Alaskan participate in the labor force at levels above the average total. The black group has the highest participation rate because of the high percentage of the males in the military and the high proportion of black females in the labor force. With the exception of the Natives, all other groups are within 6 percentage points of the average. The Native group participation is 23 percentage points below the average. The reasons for this low participation rate probably are identical to the reasons for the high jobless rates. Their participation appears to increase where there are more job opportunities, such as in the state's urban areas. In southeast Alaska, particularly Juneau and Sitka, the Native population has a higher participation rate in the labor force than they have elsewhere in the state. It is in the rural areas where the rates are particularly low with Yukon Koyukuk having the lowest rate. In that area a little more than a third of the working age population is active in the labor force. The other ethnic/race groups have high participation rates in the rural areas, in many cases higher than in the urban areas. This may be because they migrated to these areas specifically for employment reasons with jobs already waiting for them (teachers, medical personnel, etc). They probably tend to be young, and when they leave their employment in these areas, they often leave the area altogether.

This past decade has brought significant changes in the makeup of Alaska's labor force, particularly in the increased role women are presently playing. The growth of women in the labor force that has taken place has been unprecedented.

Table I
Alaska
Civilian Labor Force Status
by Sex, Race and Ethnic Orgin
1980 Census

	Civilian Labor Force	Unemployment Rate
Total	100.0%	9.7%
White	83.4	8.2
Black	2.8	14.4
Native Alaskan	10.8	20.3
Asian & Pacific Islander	2.2	6.5
Other	0.8	18.5
Spanish Origin 1/	1.9	12.4
Minority Group 2/	18.5	16.9
Male	57.9	11.0
White	48.9	9.1
Black	1.4	16.5
Native Alaskan	6.0	24.5
Asian & Pacific Islander	1.1	5.5
Other	0.4	23.9
Spanish Origin 1/	1.1	14.4
Minority Group 2/	10.1	20.1
Female	42.1	8.1
White	34.6	7.0
Black	1.4	12.1
Native Alaskan	4.8	15.0
Asian & Pacific Islander	1.0	7.5
Other	0.3	10.7
Spanish Origin 1/	0.8	9.8
Minority Group 2/	8.3	12.9

Source: U.S. Department of Commerce, Bureau of the Census

1/ Not included in distribution because of duplication. Any race may be of Spanish Origin.

2/ Sum of Spanish Origin and all races except White.

Table II
Labor Force Participation 1/
Rates by Sex, Race and Ethnic Origin
1980 Census

	Both Sexes					
	Total	White	Black	Native	Asian	Spanish
State	72.0	75.0	84.0	49.0	74.0	78.0
Nation	62.0	62.0	59.0	—	66.0	63.0
Aleutian Islands	80.0	90.0	97.0	40.0	84.0	95.0
Anchorage	76.0	77.0	84.0	58.0	73.0	75.0
Bethel	50.0	89.0	95.0	40.0	71.0	93.0
Bristol Bay	75.0	83.0	100.0	51.0	—	94.0
Dillingham	52.0	81.0	—	41.0	—	—
Fairbanks North Star	74.0	75.0	79.0	48.0	62.0	75.0
Haines	65.0	65.0	—	—	—	—
Juneau	79.0	81.0	71.0	65.0	66.0	77.0
Kenai Peninsula	69.0	64.0	91.0	58.0	67.0	71.0
Ketchikan Gateway	71.0	74.0	—	55.0	65.0	60.0
Kobuk	52.0	87.0	—	45.0	—	86.0
Kodiak Island	75.0	78.0	71.0	49.0	94.0	87.0
Matanuska-Susitna	63.0	63.0	69.0	50.0	26.0	65.0
Nome	53.0	81.0	—	43.0	—	74.0
North Slope	70.0	94.0	—	60.0	83.0	100.0
Prince of Wales/ Outer Ketchikan	66.0	71.0	81.0	59.0	38.0	—
Sitka	75.0	76.0	—	68.0	83.0	79.0
Skagway-Yakutat-Angoon	65.0	70.0	—	56.0	—	—
Southeast Fairbanks	71.0	74.0	94.0	45.0	30.0	69.0
Valdez-Cordova	69.0	71.0	91.0	47.0	100.0	76.0
Wade Hampton	46.0	93.0	—	42.0	—	—
Wrangell-Petersburg	70.0	73.0	—	53.0	69.0	81.0
Yukon-Koyukuk	55.0	73.0	94.0	37.0	—	66.0

Table II
(Continued)
Labor Force Participation 1/
Rates by Sex, Race and Ethnic Origin
1980 Census

	Female					
	Total	White	Black	Native	Asian	Spanish
State	60.0	62.0	74.0	43.0	63.0	61.0
Nation	50.0	50.0	53.0	—	57.0	49.0
Aleutian Islands	64.0	77.0	91.0	30.0	60.0	84.0
Anchorage	65.0	65.0	77.0	52.0	63.0	58.0
Bethel	42.0	83.0	100.0	34.0	60.0	82.0
Bristol Bay	55.7	58.0	100.0	47.0	—	88.0
Dillingham	47.0	72.0	—	39.0	—	—
Fairbanks North Star	59.0	61.0	64.0	37.0	54.0	58.0
Haines	50.0	50.0	—	49.0	—	—
Juneau	71.0	73.0	52.0	61.0	56.0	68.0
Kenai Peninsula	50.0	50.0	100.0	48.0	66.0	46.0
Ketchikan Gateway	57.0	95.0	—	46.0	60.0	52.0
Kobuk	52.0	87.0	—	45.0	—	86.0
Kodiak Island	60.0	64.0	56.0	35.0	90.0	74.0
Matanuska-Susitna	48.0	48.0	67.0	46.0	38.0	41.0
Nome	47.0	73.0	—	40.0	—	80.0
North Slope	55.0	87.0	—	48.0	80.0	100.0
Prince of Wales/ Outer Ketchikan	48.8	51.0	58.0	47.0	0.0	—
Sitka	64.0	65.0	100.0	58.0	59.0	91.0
Skagway-Yakutat-Angoon	54.0	55.0	—	53.0	—	—
Southeast Fairbanks	52.0	55.0	83.0	40.0	17.0	37.0
Valdez-Cordova	57.0	59.0	50.0	43.0	100.0	53.0
Wade Hampton	40.0	87.0	—	35.0	—	—
Wrangell-Petersburg	56.0	59.0	—	44.0	45.0	69.0
Yukon-Koyukuk	44.0	50.0	60.0	41.0	—	15.0

Source: U.S. Department of Commerce, Bureau of the Census

1/ The labor force participation rates include the total noninstitutionalized population 16 years and older. Unlike the civilian labor force participation rate, these rates include the military.

ALASKA

By Brit Harvey

Construction Employment Outlook

Most forecasts prepared near the end of last year called for no increase in 1983 construction employment (Alaska Pacific Bank)*1/* or a 3% decline (Office of the Governor, Division of Budget and Management).*2/* It now appears that rather than remaining flat or declining, the 1983 construction season will be the biggest since the pipeline. However, substantial declines are likely in 1984 and 1985.

Outlook for 1983

Nearly all major sources of construction employment will contribute strongly in 1983. North Slope oil-field development construction is expected to peak in 1983. The largest Prudhoe Bay project is waterflood, which will increase Prudhoe's ultimate production by 4 billion barrels and is scheduled for start up in 1984. Prudhoe Bay owners have invested about $9 billion in field development and plan to spend $7.5 billion more. Although much of this money is not spent in Alaska, the impact of petroleum-related construction in the state is huge. *Alaska Construction and Oil* magazine forecasts a total of $2.32 billion in contract awards for 1983, with 65% attributed to statewide petroleum-related construction.*3/*

Federal funding for highway construction is expected to increase from the 1982 level of $106 million to $140 million in 1983 due to the new 5 cent per gallon national gasoline tax.

The outlook for residential construction is surprisingly strong coming on top of a record year in 1982. Statewide dwelling unit building permits for the first quarter of 1983 were up 118% over the same quarter last year. Anchorage accounted for 89% of these permits. While permit activity is unlikely to maintain this rate throughout 1983, it does appear that residential construction will set another record this year.*4/*

Commercial construction will show even greater growth this summer. Commercial space for 350 stores, valued at over $100 million, is planned for Anchorage this year.*5/* Commercial construction is also expected to boom in Juneau, due to the capital move rejection. At least one large department store, three fast-food franchises, a mall addition, and several new commercial buildings will be started in Juneau this summer.

Office construction employment will decline in 1983, as major projects such as the ARCO building near completion. However, there is still substantial office construction employment in Anchorage which may be supplemented by the start of the planned Sohio building.

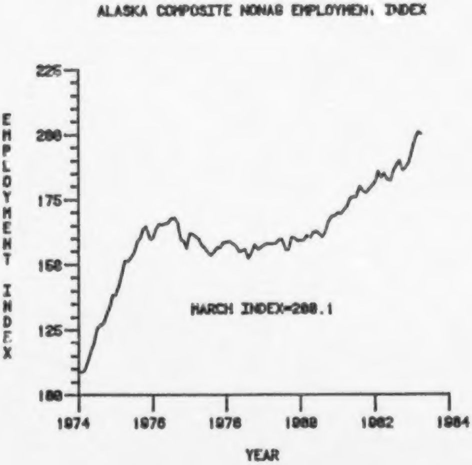
State Department of Transportation and Public Facilities (DOTPF) construction expenditures in 1983 are expected to exceed $210 million or at least 11% higher than 1982.6/ Many observers expected the state to curtail its capital budget in the face of declining revenue. The unexpected increase is the result of supplemental appropriations for "bid-ready" projects proposed by Governor Sheffield and approved by the Legislature. This appropriation of more than $240 million will increase DOTPF's 1983 expenditures by $83 million, with the remaining two thirds distributed through local governments.

Overall, 1983 will be the biggest construction season since the pipeline. Additional growth in construction employment of about 10% is likely, on a 1982 base which was almost 20% above 1981.

Beyond 1983

The outlook for construction employment changes drastically beyond 1983. Substantial declines are almost certain to occur in both 1984 and 1985. A sector by sector analysis of the industry shows why.

The investment necessary to maximize Prudhoe Bay production will be largely in place by 1984. Construction related to field development will decline. While other oil-related construction employment, such as gravel



island construction in the Beaufort Sea, will pick up some slack, nothing is likely to replace the peak employment of the major Prudhoe Bay projects.

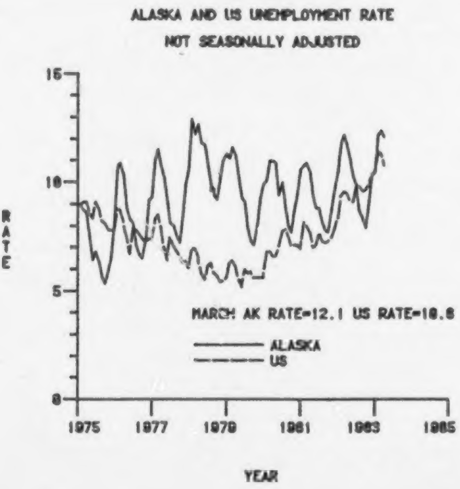
The one-time boost in federal highway funding will not recur, barring further tax increases.

Anchorage, where nearly nine out of every ten Alaska residential building permits were issued during the first quarter of 1983, is showing clear signs of overbuilding. The March 1983 rental vacancy rate was 8.5%, up from 1% a year ago. The inventory of housing units on the market has more than doubled during the same period. The population growth necessary to sustain the current level of residential construction is highly unlikely in view of declining oil prices and an improving economy in the lower 48.

Anchorage office space is reportedly 20% vacant, with the Sohio building still to be built and new state office space being considered. Some observers consider the current Anchorage office space inventory sufficient for four years.

Commercial space displays the same pattern, with currently planned projects likely to more than meet demand for several years.

State construction presents an even greater certainty of decline in 1984 and 1985. The "bid-ready" projects pressed forward into the 1983 construction season would have been constructed in 1984 and 1985. In combination with



lower state oil revenue, current state capital budget policy will contribute to a decline following a peak construction year in 1983.

While forecasts are always subject to some degree of error, it is difficult to foresee any scenario which could result in construction employment growth continuing beyond 1983.

Analysis

Construction is an inherently cyclical industry, both nationally and in Alaska. Several unique aspects of the Alaska economy are currently acting in concert to accentuate the boom portion of the cycle, and by extension, the bust side as well.

The phenomenal boom in residential construction is largely due to the creation by the state of a subsidized secondary mortgage market in the form of the Alaska Housing Finance Corporation (AHFC). Alaska financial institutions active in the mortgage field have essentially become loan production and servicing agencies. The Alaska residential construction and real estate industries have therefore been partially freed from the normal constraints imposed by market interest rates and skeptical bankers. This situation allowed Alaska residential construction to boom while high interest rates crippled similar construction in the rest of the country. Currently, there is no short-term brake on the construction process, as would normally be applied by private sector lenders. The long-term brake is declining state subsidy to homeownership, possibly applied rather suddenly due to declining state oil revenue.

Direct state-funded construction is following a similar cycle based on state oil income and complicated by a lag due to administrative processing. The supplemental appropriation for bid-ready projects serves to shorten the lag period at the top of the cycle, producing a higher peak and a sharper decline.

Prudhoe Bay development expenditures are primarily based on engineering requirements, and are only coincidentally peaking concurrently with other oil-revenue/politically influenced sectors.

In general, the current period of rapid economic expansion has been construction-led and oil wealth-financed. The combination of economic factors which created the boom will peak in 1983. Following years will see a new phase in the Alaska economy, as construction no longer drives economic growth.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA

	P/	R/		CHANGES FROM:	
	3/83	**2/83**	**3/82**	**2/83**	**3/82**
Nonag. Wage & Salary......	198600	194700	183700	3900	14900
Mining	9500	9400	8900	100	600
Construction	13700	13000	11500	700	2200
Manufacturing	9000	7900	9200	1100	-200
Food & Kindred Prod.....	4100	3500	4200	600	-100
Lumber & Paper Prod....	2200	1800	2500	400	-300
All Other Mfg.	2700	2600	2500	100	200
Trans. Comm. & Util.	18500	18300	17300	200	1200
Trucking & Whseing.	2700	2700	2600	0	100
Water Transportation	1300	1300	1100	0	200
Air Transportation	5500	5400	5200	100	300
Other Trans. Comm. & Utilities.................	9000	8900	8400	100	600
Trade	37900	37600	33300	300	4600
Wholesale Trade	7500	7400	6800	100	700
Retail Trade..............	30400	30200	26500	200	3900
Gen. Merchandise & Apparel	4500	4400	3800	100	700
Food Stores.............	5000	5000	4400	0	600
Eating & Drinking Places	10600	10600	9500	0	1100
Other Retail Trade	10300	10200	880	100	1500
Finance-Ins. & R. Estate ..	9800	9500	9000	300	800
Services & Misc...........	35800	35400	33400	400	2400
Government	64400	63600	61100	800	3300
Federal	18000	18000	17300	0	700
State	19200	18500	17800	700	1400
Local.....................	27200	27100	26000	100	1200

Prepared in cooperation with the U.S. Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

1/ *Alaska Business Trends-1983 Economic Forecasts;* Alaska Pacific Bank; p. 22

2/ *AEIRS Quarterly Report;* Nov. 1983; p. 25

3/ *Alaska Construction and Oil;* April 1983; p. 12

4/ Al Robinson; U.S. Dept. of Housing and Urban Development, Anchorage; Conversation 4/18/83

5/ Anchorage Daily News; 4/16/83; p. E-1

6/ Wayne Weeks; Alaska Department of Transportation and Public Facilities, Planning; Conversation 3/24/83

Nonagricultural Employment

Alaska nonagricultural wage and salary employment was 198,600 in March, 2.0% higher than February and 8.1% over last year.

At the industry level there were few changes. Logging employment nearly doubled to 750 as several logging camps reopened. This increase resulted in few new job openings, as returning employees took almost all the positions.

Trade employment is booming, with 13.8% growth over last year. This growth is stronger in retail than wholesale trade, and is spread throughout the retail sector. Juneau will experience a large increase in retail trade employment during the next two years due to the rejection of the capital move.

Unemployment

Alaska unemployment was 12.1% in March. Although the March rate was down from February's 12.4% it was above the 11.7% rate of last March. Compared to previous years, March unemployment was high.

LABOR FORCE BY REGION AND CENSUS DIVISION

	Labor Force			Unemployment			Rate			Employment		
	P	*R*		*P*	*R*		*P*	*R*		*P*	*R*	
	3/83	2/83	3/82	3/83	2/83	3/82	3/83	2/83	3/82	3/83	2/83	3/82
Alaska Statewide	212280	209614	199902	25752	26055	23429	12.1	12.4	11.7	186528	183559	176473
Anch.-Matsu Region	109873	108593	101597	10719	10428	9128	9.8	9.6	9.0	99154	98165	92469
Anchorage	98788	97557	91586	8823	8489	7686	8.9	8.7	8.4	89965	89068	83900
Matanuska-Susitna	11085	11036	10011	1896	1939	1442	17.1	17.6	14.4	9189	9097	8569
Gulf Coast Region	22841	22726	21560	3780	4043	3696	16.5	17.8	17.1	19061	18683	17864
Cordova	1195	1168	1134	175	168	178	14.6	14.4	15.7	1020	1000	956
Kenai	12084	11834	11283	2372	2315	2181	19.6	19.6	19.3	9712	9519	9102
Kodiak	4734	4967	4598	382	701	519	8.1	14.1	11.3	4352	4266	4079
Seward	1695	1688	1555	336	356	281	19.8	21.1	18.1	1359	1332	1274
Valdez	3133	3069	2990	515	503	537	16.4	16.4	18.0	2618	2566	2453
Interior Region	27840	28154	26254	4417	4691	3778	15.9	16.7	14.4	23423	23463	22476
Fairbanks	22652	22903	21356	3560	3779	3037	15.7	16.5	14.2	19092	19124	18319
Southeast Fairbanks	2206	2210	2145	291	292	307	13.2	13.2	14.3	1915	1918	1838
Upper Yukon	694	707	643	123	135	95	17.7	19.1	14.8	571	572	548
Yukon-Koyukuk	2288	2334	2110	443	485	339	19.4	20.8	16.1	1845	1849	1771
Northern Region	10266	9969	9822	934	841	971	9.1	8.4	9.9	9332	9128	8851
Barrow-North Slope	2670	2621	2609	153	159	222	5.7	6.1	8.5	2517	2462	2387
Kobuk	3220	3125	3083	324	292	336	10.1	9.3	10.9	2896	2833	2747
Nome	4376	4223	4130	457	390	413	10.4	9.2	10.0	3919	3833	3717
Southeast Region	31309	30521	30048	4642	4971	4478	14.8	16.3	14.9	26667	25550	25570
Angoon	427	422	416	74	84	78	17.3	19.9	18.8	353	338	338
Haines	1147	1100	1044	247	238	181	21.5	21.6	17.3	900	862	863
Juneau	10932	10475	10373	1253	1200	1091	11.5	11.5	10.5	9679	9275	9282
Ketchikan	6567	6523	6455	957	1148	1076	14.6	17.6	16.7	5610	5375	5379
Outer Ketchikan	876	909	898	215	276	264	24.5	30.4	29.4	661	633	634
Prince of Wales	1592	1567	1450	358	385	267	22.5	24.6	18.4	1234	1182	1183
Sitka	4369	4231	4332	458	484	582	10.5	11.4	13.4	3911	3747	3750
Skagway	1622	1598	1493	318	348	242	19.6	21.8	16.2	1304	1250	1251
Wrangell-Petersburg	3777	3696	3587	762	808	697	20.2	21.9	19.4	3015	2888	2890
Southwest Region	10151	9651	10621	1260	1081	1378	12.4	11.2	13.0	8891	8570	9243
Aleutian Islands	2605	2498	2766	187	167	252	7.2	6.7	9.1	2418	2331	2514
Bethel	3263	3089	3400	435	363	460	13.3	11.8	13.5	2828	2726	2940
Bristol Bay Borough	375	358	403	56	50	71	14.9	14.0	17.6	319	308	332
Bristol Bay	1364	1296	1383	170	145	142	12.5	11.2	10.3	1194	1151	1241
Kuskokwim	906	866	990	135	123	188	14.9	14.2	19.0	771	743	802
Wade Hampton	1638	1544	1679	277	233	265	16.9	15.1	15.8	1361	1311	1414

P/=Preliminary 1982 Benchmark

R/=Revised

Federal guidelines require the use of unrounded labor data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

ANCHORAGE/MATSU

By Greg Huff

Labor Force

The unemployment rate in March for the Anchorage-MatSu region moved slightly upwards in response to a greater increase in the number of unemployed than expansion in employment. A rate increase in March is not rare; but it more commonly peaks in February and dips in March.

Nonagricultural Employment

March historically is a turnaround month in the seasonal employment cycle. This past winter employment dropped by 5,600. Like the winter of 1981-1982, this winter had fewer layoffs than past years. Construction employment losses totaled 4,550.

Because March marks the beginning of the seasonal upswing in overall construction activity, the month foreshadows what may be in store for the summer in Anchorage's most seasonally volatile industry —construction.

Total nonagricultural employment in March rose 1.0% over February. All major industry groups and government registered increases. First quarter data for 1983 show total employment growth of 9.1% over comparable 1982 data. Construction employment stands at 11.8% above first quarter 1982 levels.

Other construction activity indicators also show significant gains over 1982. Estimated value of construction projects by permits was up 120% over 1982's first quarter statistics. The number of issued housing permits for the first three months was up 32% over 1982, with condominiums leading the way.

First quarter estimated dollar valuation of commercial and residential construction permits for the Anchorage area topped $86 million and will continue to climb. The yearly total for 1982 hit $562.7 million. A substantial portion of the 1982 dollars are being carried over into this season. Federal, state and municipality sponsored road projects slated for the 1983 season reach over the $100 million mark.

The impact of the 1983 construction season is apparent. Although there are some real concerns expressed about office space capacity and residential unit vacancies, they will not affect near term employment. There is also a substantial switch this season from commercial office space to small malls and the remodeling of existing commercial units. An example of the impact of remodeling is reflected in the dollar valuations of permits issued for such projects, which has reached more than $12 million for the first quarter of this year compared to $1.4 million last year.

Consumer Prices

During 1982, inflation at the consumer level increased at the slowest pace since 1973. The Anchorage Consumer Price Index for all Urban Consumers (CPI-U) moved up 5.5% following increases of 10.2% and 8.0% in 1980 and 1981. All major categories of consumer spending, except entertainment, registered smaller increases in 1982 than the previous year. The moderation in the housing and the transportation components was largely responsible for the slowdown in the annual CPI-U in 1982.

Table I
Consumer Price Index
Percent Change

	1980-81	1981-82
All Items	8.0	5.5
Food & Beverage	5.2	3.1
Housing	7.6	6.1
Apparel & Upkeep	4.9	2.7
Transportation	12.7	4.5
Medical Care	10.2	9.2
Entertainment	8.6	10.3
Other	6.1	5.8

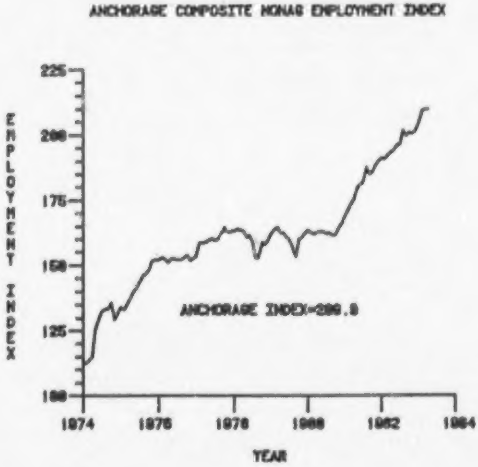
The transportation component experienced the sharpest deceleration.

The housing component, although not decelerating as briskly, has such a large weight on the over-all index (53%) that it exerts a substantial impact on the movement of the CPI.

Table II
Consumer Price Index
Percent Change

	1981	1982	Percent of Total Index
Transportation	12.7	4.5	16.8
Private transportation	10.8	3.1	14.8
Gasoline	15.0	-1.4	4.9
Public transportation	29.6	14.6	2.1
Housing*	7.6	6.1	53.3
Shelter	7.1	6.7	40.8
Rent, residential	6.8	22.2	6.0
Homeownership	7.1	4.0	34.2
Fuel & other utilities	12.0	2.0	3.8
Household furnishings & operations	8.3	5.4	8.8

* These data **do not** incorporate the new rental equivalence approach to estimating homeowner cost now used by the BLS. They do include and are heavily influenced by changes in home purchase and mortgage interest cost. Readers interested in a discussion of problems with the Anchorage housing component may refer to page 4 of the October 1982 *Trends.*



NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE-MATSU

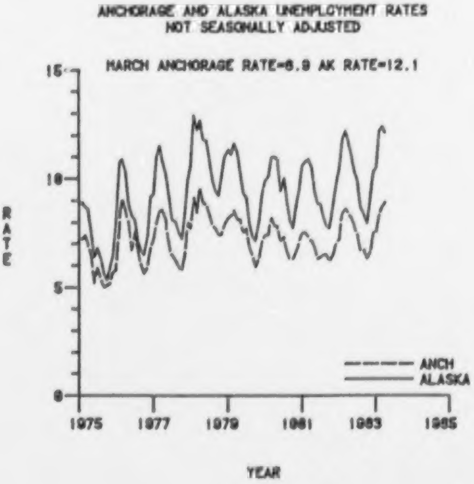
	P/ 3/83	*R/* 2/83	3/82	CHANGES FROM: 2/83	 3/82
Nonag. Wage & Salary......	101100	100100	93150	1000	7950
Mining	3900	3800	4000	100	-100
Construction	6650	6400	6150	250	500
Manufacturing	2100	2050	1900	50	200
Trans. Comm. & Util.	9350	9300	8700	50	650
Trade	24300	24250	20650	50	3650
Finance-Ins. & R. Estate ..	6450	6350	5800	100	650
Services & Misc.	21650	21400	20000	250	1650
Government	26700	26550	25950	150	750

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.



NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE

				CHANGES FROM:	
	P/	*R/*			
	3/83	**2/83**	**3/82**	**2/83**	**3/82**
Nonag. Wage & Salary	96700	95700	89100	1000	7600
Mining	3750	3650	3900	100	-150
Construction	6350	6100	6000	250	350
Manufacturing	2100	2000	1850	100	250
Food & Kindred Prod.	250	250	250	0	0
Other Mfg.	1850	1750	1600	100	250
Trans. Comm. & Util.	9050	8950	8300	100	750
Trucking & Whseing.	1400	1400	1250	0	150
Water Transportation	300	250	250	50	50
Air Transportation	3350	3300	3200	50	150
Other Transportation Comm. & Utilities	4000	4000	3600	0	400
Trade	23450	23400	19850	50	3600
Wholesale Trade	5300	5300	5050	0	250
Retail Trade	18150	18100	14800	50	3350
Gen. Merchandise	1750	1750	1600	0	150
Food Stores	2400	2400	2000	0	400
Eating & Drinking Places	6800	6800	5500	0	1300
Other Retail Trade	7200	7150	5700	50	1500
Finance-Ins. & R. Estate	6250	6150	5650	100	600
Services & Misc.	20400	20200	19150	200	1250
Government	25350	25250	24400	100	950
Federal	9650	9650	9450	0	200
State	6500	6450	6250	50	250
Local	9200	9150	8700	50	500

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

FAIRBANKS/INTERIOR

By Neal Fried

The Unemployment Rate

Never has the unemployment rate received so much attention as it has during the past two years. It is being reported much like the stock market; every time it creeps upward or downward, mass speculations and interpretations are made as to why it changed and where it is going. The public awareness of this economic statistic has never been so acute, largely as a result of the screaming headlines it has garnered and the general coverage the news media has been giving it. It has become one of the most often quoted economic indicators today. Job seekers calling our office today will often inquire about our unemployment rate and base the decision to move or not to move on the answer, something almost unheard of two years ago.

Although the unemployment rate has received considerable media attention, it is a statistic that is often completely misunderstood by the public. One common misconception regarding the unemployment rate is that the unemployed counted in this statistic are only those collecting unemployment insurance. This group is a major component of the unemployed, but any person actively seeking work, regardless of whether or not they are receiving unemployment checks, is counted as being unemployed. Calculations based on surveys and census results are used to identify those unemployed who are not collecting unemployment benefits.

One group of persons which is unemployed and not counted are those people who have given up seeking work because they believe there is no work available. They are referred to as discouraged workers. This group grows in numbers during prolonged periods of economic recession and depression. Nationally this group has grown with the present recession; but, in Fairbanks and Alaska's urban areas, it may possibly have declined because employment has grown during the past two years. In Alaska's rural areas it is generally believed that there is a large group of discouraged workers because of the scarcity of employment opportunities.

Economists have defined 4 types of unemployment: 1) frictional, 2) seasonal, 3) structural, and 4) cyclical.

Frictional unemployment is usually only temporary. It happens when a person voluntarily quits and is unemployed for a short time between jobs.

In the Interior, the seasonality of the economy due to weather accounts for a very large percentage of the unemployed. No specific percentage is

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
INTERIOR

	P/ 3/83	R/ 2/83	3/82	CHANGES FROM: 2/83	3/82
Nonag. Wage & Salary	27100	27100	25650	0	1450
Mining	300	300	250	0	50
Construction	1700	1850	1550	-150	150
Manufacturing	450	450	400	0	50
Trans. Comm. & Util.	3500	3500	3450	0	50
Trade	4750	4700	4300	50	450
Finance-Ins. & R. Estate	900	900	850	0	50
Services & Misc.	4950	4950	4800	0	150
Government	10550	10450	10050	100	500

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

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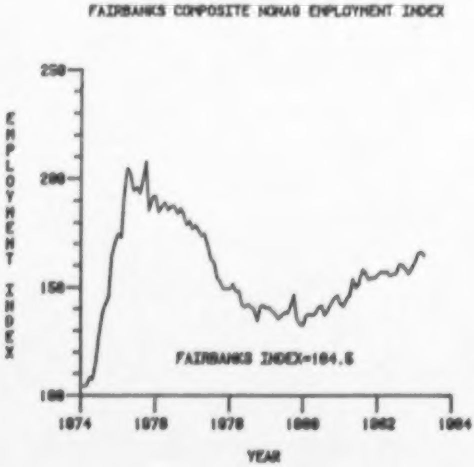
R/ Denotes revised estimates.



INTENTIONAL
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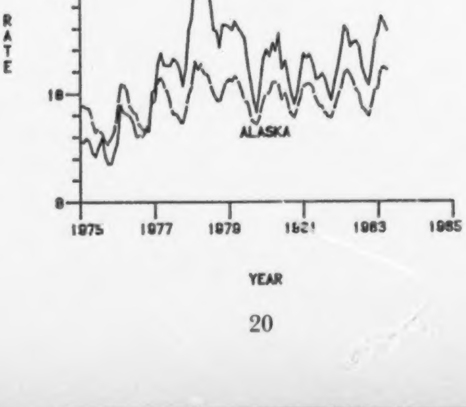
calculated, but it is not unusual to have the unemployment rate fluctuate from 8.5% in September to 15% in February during a one year period. The climate in the Interior simply precludes or puts a damper on particular activities in the winter. Much of the construction, transportation, mining and tourism industries pull in their horns for the winter causing a roller coaster effect on Fairbanks' unemployment rate. In 1982, 41.7% of workers covered by unemployment insurance in Alaska's labor force earned their living in six months or less.

Structural unemployment is very different. Structural unemployment results from a mismatch of skills a worker has and skills an employer seeks. Nationally there is presently a great deal of discussion regarding structural unemployment because of the high unemployment found in the auto and steel industries. There is always some structural unemployment in the economy simply because the demand for particular skills is always changing. No one specific industry in Fairbanks can be identified readily today as a major contributor to structural unemployment.

The fourth type of unemployment is cyclical unemployment. This typically refers to the business cycle. This is the major contributor to the nation's unemployment today. The Fairbanks' economy is not contracting presently (it is actually growing), but it is feeling some of the effects of the present national recession, since many of the unemployed job seekers from elsewhere in the country come to Fairbanks to find work. A good example of this type of unemployment in Fairbanks occurred when the construction



of the oil pipeline was completed and the economy contracted, employment declined and the unemployment rate soared to a record annual average of 17.6% in 1978, hitting a high of 20.2% in January and February.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK FAIRBANKS

				CHANGES FROM:	
	P/	R/			
	3/83	**2/83**	**3/82**	**2/83**	**3/82**
Nonag. Wage & Salary	23450	23450	22400	0	1050
Mining	100	100	100	0	0
Construction	1400	1550	1350	-150	50
Manufacturing	400	400	400	0	0
Trans. Comm. & Util.	2700	2700	2650	0	50
Trucking & Whseing.	500	500	500	0	0
Air Transportation	600	600	600	0	0
Other Trans. Comm. & Utilities	1600	1600	1550	0	50
Trade	4500	4350	4100	150	400
Wholesale Trade	800	800	800	0	0
Retail Trade	3700	3550	3300	150	400
Gen. Merchandise & Apparel	400	400	350	0	50
Food Stores	700	650	650	50	50
Other Retail Trade	2600	2500	2300	100	300
Finance-Ins. & R. Estate	850	850	850	0	0
Services & Misc.	4650	4650	4450	0	200
Government	8850	8850	8500	0	350
Federal	2350	2350	2250	0	100
State	3850	3850	3650	0	200
Local	2650	2650	2600	0	50

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

GULF COAST

By Neal Fried

Unemployment

The Gulf Coast region's unemployment rate of 16.5% represents the third straight month with declines in joblessness. The divisions' rates within the region vary from a high of 19.8% in Seward to a low of 8.1% in Kodiak. The seasonal upturn in employment has definitely hit the region, allowing workers to return to work after many months of winter unemployment. This trend should continue for the next 5-6 months as all industries get into full swing. The labor market will remain competitive, however, and as in the past, the region will be plagued with more jobseekers than jobs.

Fishing

The industries most responsible for this month's gains in employment are fish processing and construction, the two industries that bottom out in the winter and begin to gain vigor in the spring. This is particularly evident in Kodiak. After months of dismal shellfish catches, March brought with it some tanner catches large enough so that canneries could recall many of their employees. Kodiak's unemployment rate dove from 14% in February to 8.1% in March. This is not an aberration. It is par for the course in such an unpredictable industry. Most other areas in the region have not been as fortunate this year, as they continue to suffer from poor shellfish catches. With the herring season just around the corner and the salmon season not that far away, this industry should continue to add workers to its ranks through most of the remaining spring and summer seasons, with dips and peaks throughout the season.

With the exception of the food processing industry, almost all other industries have remained above last year's level. The only other industry that did not post gains but remained stable was mining. The mining employment is found almost entirely in the Kenai oil fields.

First Quarter Wage and Salary Employment

Overall wage and salary employment for the first quarter of this year for the region is 6.5% above last year's first quarter. Construction has posted the largest gains (31%) as a myriad of public projects are presently under construction in the region (See March *Trends*). Trade, services and finance, insurance and real estate have all made significant gains. Government employment also made modest advances (3.8%). This over the year growth of total wage and salary employment should continue through the year, unless an unlikely scenario occurs. Such a scenario would be the fishing season falling so far short of projections that the losses in this industry could be greater than the gains made in the other industries.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK GULF COAST

	P/	R/		CHANGES FROM:	
	3/83	**2/83**	**3/82**	**2/83**	**3/82**
Nonag. Wage & Salary......	16250	16200	15200	50	1050
Mining	900	900	900	0	0
Construction	1050	950	750	100	300
Manufacturing	2400	2300	2350	100	50
Food & Kindred Prod.....	1700	1600	1650	100	50
All Other Mfg.	700	700	700	0	0
Trans. Comm. & Util	2000	2100	1750	-100	250
Trade	2450	2450	2250	0	200
Wholesale Trade	400	400	350	0	50
Retail Trade..............	2050	2050	1900	0	150
Finance-Ins. & R. Estate ..	450	450	400	0	50
Services & Misc...........	2450	2450	2350	0	100
Government	4550	4600	4450	-50	100
Federal	500	550	500	-50	0
State	1300	1300	1300	0	0
Local.....................	2750	2750	2650	0	100

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

SOUTHEAST

By Brit Harvey

Southeast Alaska nonagricultural wage and salary employment was 27,500 in March, a 4.6% increase over February, and 5.2% higher than last year.

Logging employment doubled, as several camps opened for spring. Overall, forest products employment remained slightly below last year, and the outlook for this year remains poor. Japanese demand remains weak for cants and logs.

The predicted post-capital move rejection Juneau building boom appears to be shaping up strongly on the commercial side. Whether or not housing construction will exceed last year's record pace is unclear. Some sources predict fewer new dwelling units this year, citing the large number of houses already on the market and the continuing availability of condominium units in developments begun last summer. On the other hand, the number of building permits issued in the first quarter of 1983 is approximately double the number issued during the first quarter of 1982. Either way, construction employment should be up strongly in Juneau this summer with trade and services following later in the year.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK SOUTHEAST ALASKA

				CHANGES FROM:	
	P/	*R/*			
	3/83	**2/83**	**3/82**	**2/83**	**3/82**
Nonag. Wage & Salary	27500	26300	26150	1200	1350
Construction	1550	1300	1000	250	550
Manufacturing	2950	2400	2850	550	100
Food & Kindred Prod.	900	850	750	50	150
Lumber & Paper Prod.	1850	1350	1900	500	-50
All Other Mfg.	200	200	200	0	0
Trans. Comm. & Util.	2150	2050	2400	100	-250
Trade	4350	4250	3850	100	500
Wholesale Trade	200	200	250	0	-50
Retail Trade	4150	4050	3600	100	550
Finance-Ins. & R. Estate	1050	1000	1000	50	50
Mining, Svcs. & Misc.	3400	3350	3350	50	50
Government	12050	11950	11700	100	350
Federal	2200	2200	2250	0	-50
State	6000	5900	5400	100	600
Local	3850	3850	4050	0	-200

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

HOURS AND EARNINGS

By John Boucher

February's hours and earnings showed little change from January, an exception being Alaska's volatile manufacturing industry, which showed an overall increase in average weekly hours of 7%.

The climb in average weekly hours in manufacturing was largely due to increased activity in the food and kindred products sector of the manufacturing industry. Average weekly hours in food and kindred products jumped 53% over January and average weekly earnings increased 40% over the same period. These increases reflect the gearing up of several seafood processing plants for the tanner crab harvest following a poor king crab season.

The increase in hours and earnings in manufacturing might have been greater had the gains in food and kindred products not been somewhat offset by a decrease in hours and earnings in the lumber and paper products sector. The decrease in average weekly hours in this sector was largely due to the inactivity of Southeastern logging camps. However, hours could pick up in March as camps increase employment in preparation for summer activity.

ALASKA
HOURS AND EARNINGS FOR SELECTED INDUSTRIES 1/ 2/

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	p/ 2/83	r/ 1/83	2/82	p/ 2/83	r/ 1/83	2/82	p/ 2/83	r/ 1/83	2/82
MINING	$22.54	$22.82	$20.78	48.6	50.5	51.2	$1095.44	$1152.41	$1063.94
CONTRACT CONST.3/	23.93	23.62	22.49	40.4	40.1	43.7	966.77	913.48	982.81
MANUFACTURING	13.34	14.69	12.86	32.5	30.4	39.0	433.55	446.58	501.54
Food & Kindred Prod.	8.30	9.04	8.21	26.9	17.6	32.8	223.27	159.10	269.29
Lumber & Paper Prod.	16.94	17.25	15.28	36.4	38.5	44.2	616.62	664.13	675.38
TRANS., COMM. & UTIL.	15.38	15.04	14.89	36.4	37.4	37.3	559.83	562.50	555.40
TRADE	9.56	9.80	9.54	34.4	34.3	33.5	328.86	336.14	319.59
Wholesale Trade	11.17	11.37	11.09	37.5	37.0	37.2	418.88	420.69	412.55
Retail Trade	8.88	9.17	8.84	33.2	33.3	32.1	294.82	305.36	283.76
FINANCE, INS. & R.E.	--	--	--	--	--	--	353.69	377.62	342.81

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor

2/ Excludes eating and drinking establishments

3/ Due to technical revision in construction sample, 1982 estimates are not strictly comparable to previous years data.

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

6/29/83 S0320-1 A

JUNE 1983

ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska

1 Employment Outlook 1983-1988
11 Anchorage Services Employment

ALASKA ECONOMIC TRENDS

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Alaska Department of Labor

Bureau of Labor Statistics
U.S. Department of Labor

Employment and Training Administration
U.S. Department of Labor

June 1983
Volume 3
Issue 6

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Alaska Economic Trends is published monthly by the Alaska Department of Labor, Research & Analysis Section, P.O. Box 1149, Juneau, Alaska 99802.

POSTMASTER: Send address change to ALASKA ECONOMIC TRENDS, P.O. BOX 1149, Juneau, Alaska 99802.

EMPLOYMENT OUTLOOK 1983-1988

By Brit Harvey

METHODOLOGY

A discussion of likely trends in Alaska nonagricultural wage and salary employment, overall and by industry, is presented below for the period 1983 to 1988. This outlook is based on Research and Analysis staff judgement. Major assumptions are noted where appropriate.

OVERVIEW

The Alaska economy is currently experiencing rapid growth. The primary cause of this growth is State spending and lending of Prudhoe Bay revenue. A November 1982 study found a close correlation (R^2=.85) between State expenditures and employment.*1/* While the exact degree of influence is debatable, it is clear that State expenditures are driving the economy. State expenditures are the key economic variable during the forecast period.

State expenditures are essentially a function of three variables; Prudhoe Bay (including Kuparuk) production, the price of Prudhoe Bay crude oil, and the lag time between receipt and actual warrant expenditure of State income. Prudhoe Bay is currently very close to peak production of 600 million barrels per year. Production will decline rapidly, beginning about 1988. The probability of new fields contributing significantly to the State's income as Prudhoe Bay declines has been estimated at less than 1%. The probability of other sources, such as income taxes or coal production taxes, contributing significantly during the decline approaches zero. Only Prudhoe Bay natural gas could slow the decline, and this appears very unlikely. Of all the economic factors influencing Alaska employment, the decline of Prudhoe Bay production and the impossibility of replacing the State's Prudhoe Bay income flow are the most predictable.

The price received for Prudhoe Bay crude was $27 per barrel (FOB U.S. Gulf Coast) in March 1983. (This price is about $1 below the comparable delivered spot price for Saudi light crude.)

It is assumed that the Alaska crude price will continue to fall gradually to about $25 per barrel, and will remain at this level throughout the forecast period. This assumption might be considered conservative in the chaotic world oil market.

While Prudhoe production is largely an environmental given and world oil prices are beyond the control of any organization, the lag time between State oil income receipt and expenditure is at least theoretically a public policy. A recent study*2/* outlined a scenario where the State could cut spending, increase savings, and operate comfortably off the interest indefinitely. The opposite scenario is rapid spending of State revenue accompanied by State borrowing to "leverage" the Prudhoe Bay wealth. All indications are that the State is following the latter course. Lacking evidence of an overriding public will to save the Prudhoe Bay inheritance and curtail current spending, the assumption is made that the current pattern of State spending will continue. This means disbursement in some manner of permanent fund dividends, substantial additions to bonded indebtedness, allocations of almost all revenues in the year they are forecast to be received, and a substantial lag between allocation and actual warrant expenditure due to administrative delay.*3*/

Population is another variable best discussed in overview. The relationship between population and employment is important and complex. Increasing employment opportunities trigger in-migration, which creates further new job opportunities. This positive feedback cycle is currently operating strongly.

The assumption is made that national unemployment rates will remain at 10.0% or above through 1983, and will remain above 8.5% throughout the forecast period. This will produce in-migrant pressure, particularly during 1983. The extremely rapid population growth of the last two years is assumed to continue through 1983, and to decelerate in 1984, reaching a plateau in 1985, and showing only slight increases for the rest of the forecast period.

Nonagricultural wage and salary employment will increase by 5% during 1983. Construction and secondary industries will drive this growth. 1984 is likely to see a leveling off of employment growth.

Under the assumptions presented above, little growth can be expected during 1985-87. 1988, the five-year horizon of this forecast, is likely to see an employment decline of about 3%. The decline of Prudhoe Bay production will be inescapable, as state and local government layoffs combine with secondary industry contraction to reduce employment. No major project will take up the slack. The business and employment outlook will be bleak.

It should be noted that the potential exists for a statewide depression occurring in the mid to late 1980's. Several economists have made such a forecast. While this scenario is considered less likely than that presented above, the sensitivity of Alaska's economy to volatile oil prices introduces uncertainty into any forecast. The possibility of economic contraction occurring prior to Prudhoe Bay's decline deserves consideration.

MAJOR INDUSTRY FORECASTS

MINING 8,900 (1982 Annual average employment)

OIL AND GAS

Oil and gas employment will remain stable in 1983, and increase at about 3% annually from 1984 through 1988. Growth will be driven by statewide exploration and preliminary development of Beaufort Sea fields. The large payments made for Beaufort Sea leases, Alaska's high potential for giant fields, and the oil pipeline owners' need for crude to send through the pipeline following Prudhoe Bay's decline, all insure prompt, continuing investment in Alaska. Relatively tight industry budgets will slow this growth somewhat, and will prevent growth in employment during 1983.

OTHER MINING

Despite widespread publicity, non-oil mining is a minor industry in Alaska (9% of mining employment), and will remain so throughout the forecast period. The following projects will not affect employment significantly during the forecast period: Diamond Shamrock/CIRI Beluga coal, Placer Amax synthetic fuels, Cominco/NANA metals, and (due to small size) Noranda metals. The U.S. Borax molybdenum project must currently be considered questionable due to extremely poor molybdenum markets and projected poor world steel markets during the forecast period.

FORECAST - Gradual growth from 1984 through 1988, with possible faster growth in 1987 and 1988 due to the Borax project.

CONSTRUCTION 14,100

Construction is primarily a function of state expenditures and oil industry investment. Oil industry construction expenditures will peak during 1983. By 1984 the massive investment in Prudhoe/Kuparuk will be largely complete, and construction employment will decline sharply on the North Slope. Further declines are expected in 1985. Beyond 1985 construction employment is likely to increase somewhat due to Beaufort Sea exploration and development.

Non-oil related construction will follow a different trend. Following a post-pipeline peak in 1983 (8-10% annual growth), construction will drop in 1984 and will continue to decline through the forecast period. The pattern is closely related to state expenditures.

FORECAST - 11% growth in 1983, followed by a steep decline in 1984, and further declines through 1988.

MANUFACTURING 11,600

FOOD AND KINDRED

This sector is heavily influenced by the size of fish runs, which are difficult to forecast. A small decline is likely in 1983. Beyond 1983 it is assumed that employment will be stable. Significant increases in bottomfish processing employment are assumed not to occur during the forecast period.

FOREST PRODUCTS

A slight recovery may occur in 1983 due to increased Japanese demand. Beyond this point there is no reason to assume any further recovery will occur. There is the possibility of temporary or permanent employment declines should industry firms encounter further financial difficulties.

OTHER MANUFACTURING

It appears that Tesoro will expand its refinery, marginally increasing employment. Elsewhere, other manufacturing will behave similarly to the secondary industries.

FORECAST - Modest growth in 1983 and 1984. No growth through 1985 and 1986. Decline in 1988.

GOVERNMENT 60,200

FEDERAL

Federal government employment has remained flat during the 1980's. There is no reason to expect a change in this trend. Population-driven increases will be balanced by cutbacks in other programs.

STATE AND LOCAL

The Sheffield administration appears to be making a sustained effort to limit state government employment growth. The proposed zero-based budget for SFY85 can be expected to result in cutbacks. Population growth will put upward pressure on State employment for at least two years. Revenue declines will exert downward pressure, although the timing is a political question.

Local government employment will be heavily influenced by State contributions to local budgets. Local government is even more sensitive to population related demands.

FORECAST - Government employment will increase slightly in 1983, and gradually decline through the remainder of the forecast period. The potential exists for growth in the earlier period followed by a crisis collapse in State and local employment in the late 1980's.

SECONDARY INDUSTRIES 96,800

State expenditures and population are the primary influences on the secondary industries. The maturing of Alaska's economy during the current boom has increased the per capita secondary industry employment, which further increases population. This feedback phenomenon will also operate in reverse during the late 1980's, although not as strongly as during the growth phase.

FORECAST - 7% increase in 1983, 4-5% growth in 1984, 1% growth in 1985, flat in 1986 and 87, and a 2% decline in 1988.

SOURCES:

1/ "State Spending and the Alaska Economy", Erickson and Associates; Nov. 1982.

2/ "Sustainable Spending Levels from Alaska State Revenues;" Scott Goldsmith; March 1983.

3/ See 1 above.

Alaska Annual Average
Nonagricultural Wage and Salary Employment Forecasts
1983-1988 1/

	1982	1983	1984	1985	1986	1987	1988
TOTAL	194,400	204,100	206,100	206,100	206,100	205,700	199,500
Mining	9,100	9,100	9,400	9,700	10,000	10,200	10,300
Construction	14,500	16,000	13,200	12,200	11,100	10,900	10,000
Manufacturing	11,100	11,800	12,000	12,200	12,200	12,200	12,000
Food & Kindred	5,700	5,600	5,600	5,600	5,600	5,600	5,600
Lumber & Pulp	2,700	2,900	3,000	3,000	3,000	3,000	3,000
Other	2,700	3,100	3,400	3,000	3,600	3,600	3,400
Trans. Comm. & Util.	18,400	19,300	19,900	20,000	20,200	20,100	20,000
Trade	35,600	38,000	39,800	40,000	40,600	41,400	41,100
Finance-Ins. & Real Estate	9,400	10,300	10,900	11,000	11,200	11,400	10,900
Services	35,000	38,200	39,800	40,000	40,600	41,200	38,900
Government	61,200	61,400	61,100	61,000	60,200	59,200	56,300
Federal	17,900	17,900	17,900	17,900	17,900	17,900	17,900
State	17,800	17,900	17,800	17,600	17,300	17,000	15,800
Local	25,400	25,600	25,400	25,500	25,000	24,300	22,600

1/ Subcategories may not sum due to rounding.

Alaska Annual Average Percent Change
Nonagricultural Wage and Salary Employment Forecasts
1982-1988

	82-83	83-84	84-85	85-86	86-87	87-88
TOTAL	4.9	1.0	0.0	0.0	-0.2	-3.0
Mining	0.0	3.3	3.2	3.1	2.0	1.0
Construction	10.3	-17.5	-7.6	-9.0	-1.8	-8.3
Manufacturing	6.3	1.7	1.7	0.0	0.0	-1.6
Food & Kindred	-1.8	0.0	0.0	0.0	0.0	0.0
Lumber & Pulp	7.4	3.4	0.0	0.0	0.0	0.0
Other	14.8	9.7	5.9	0.0	0.0	-5.6
Trans. Comm & Util.	4.9	3.1	0.5	1.0	-0.5	-0.5
Trade	7.3	4.2	0.5	1.5	2.0	-0.7
Finance-Ins. & Real Estate	9.6	5.8	0.9	1.8	1.8	-4.4
Services	9.1	4.2	0.5	1.5	1.5	-5.6
Government	0.3	-0.5	-0.2	-1.3	-1.7	-4.9
Federal	0.0	0.0	0.0	0.0	0.0	0.0
State	0.6	-0.6	-1.1	-1.7	-1.7	-7.1
Local	0.8	-0.8	0.4	-2.0	-2.8	-7.0

ALASKA

By Brit Harvey

NONAGRICULTURAL EMPLOYMENT

Alaska nonagricultural wage and salary employment was 203,900 in April. This figure was 3.0% above March and 8.6% higher than April 1982.

Due to changes in the seasonal pattern of Alaska nonagricultural employment, it is difficult to interpret seasonally adjusted employment data. Despite a 0.4% monthly decline in April seasonally adjusted employment, it is likely that there was underlying economic expansion during the month. The seasonal adjustment procedure tends to overstate growth in the fall and understate growth during spring when applied to an economy experiencing abruptly diminished seasonality, as is the case in Alaska. The Composite Nonagricultural Employment Indexes published in *Trends* incorporate seasonal adjustment, and are affected by the phenomenon discussed above.

Construction employment surged in April, with 2,000 jobs added during the month. The April data are consistent with a construction season exceeding last year's post-pipeline record.

FOREST PRODUCTS

Despite forest products employment increasing by 300 jobs in April, the few bright spots for the industry are fading. Employment was down by 700 from last year's depressed level. While a temporary pulp mill closure accounted for about half of this annual decline, it appears that industry employment is beginning a third straight year of contraction. A mild winter in Southeast allowed an early spring opening of camps, creating a rise in employment. Rather than signaling a pickup in production, however, it appears likely that log demand will be quickly filled. The result may be simply a change in the timing of logging employment, rather than any increase.

The much-publicized national pick-up in housing starts is sputtering as long-term interest rates edge up. Some of the housing start surge is now being attributed to a weather-related seasonal adjustment anomaly.

The depressed Alaska forest products industry seems likely to continue its slump.

FEDERAL EMPLOYMENT

Federal government employment, which was stable during the first two

(Text continued on page 10)

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK ALASKA

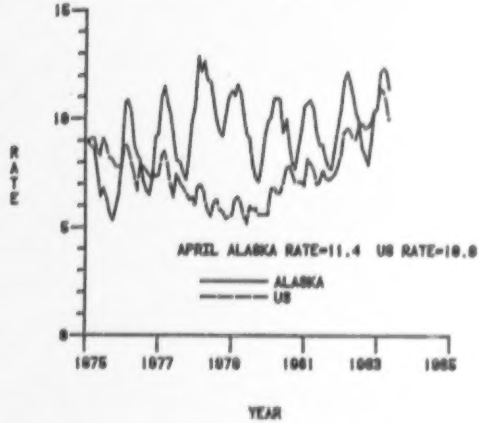
				CHANGES FROM:	
	P/	*R/*			
	4/83	**3/83**	**4/82**	**3/83**	**4/82**
Nonag. Wage & Salary	203900	198000	187800	5900	16100
Mining	9900	9500	8800	400	1100
Construction	15100	13100	13100	2000	2000
Manufacturing	9500	9200	9400	300	100
Food & Kindred Prod.	4300	4400	3700	-100	600
Lumber & Paper Prod.	2400	2100	3100	300	-700
All Other Mfg.	2800	2700	2600	100	200
Trans. Comm. & Util.	18800	18600	17500	200	1300
Trucking & Whseing.	2700	2600	2600	100	100
Water Transportation	1400	1400	1100	0	300
Air Transportation	5600	5600	5300	0	300
Other Trans. Comm. & Utilities	9100	9000	8500	100	600
Trade	38800	37900	34000	900	4800
Wholesale Trade	7700	7500	7000	200	700
Retail Trade	31100	30400	27000	700	4100
Gen. Merchandise & Apparel	4600	4400	3900	200	700
Food Stores	5000	5100	4200	-100	800
Eating & Drinking Places	10900	10600	9900	300	1000
Other Retail Trade	10600	10300	9000	300	1600
Finance-Ins. & R. Estate	9800	9600	9200	200	600
Services & Misc.	37200	36000	34200	1200	3000
Government	64800	64100	61600	700	3200
Federal	18100	18000	17400	100	700
State	19100	19000	18000	100	1100
Local	27600	27100	26200	500	1400

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

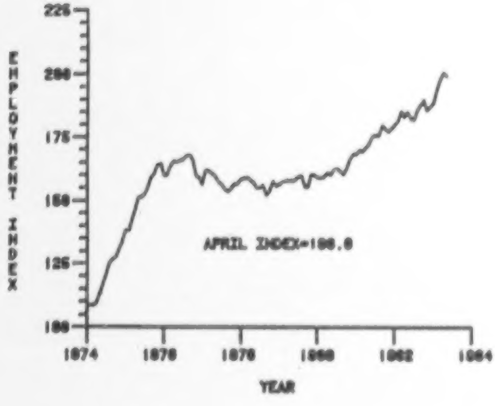
P/ Denotes preliminary estimates.

R/ Denotes revised estimates.



ALASKA AND US UNEMPLOYMENT RATE
NOT SEASONALLY ADJUSTED

APRIL ALASKA RATE=11.4 US RATE=10.0



ALASKA COMPOSITE NONAG EMPLOYMENT INDEX

APRIL INDEX=198.8

years of the Reagan administration, is now increasing. The April figure was 4.0% above last year. This federal government employment growth is attributable to increased employment of civilians by the military. Although the Reagan administration military buildup is primarily oriented toward large weapons systems, it is having an impact on Alaska employment as well.

UNEMPLOYMENT

The number of unemployed Alaskans declined by over 1100 during April. The Alaska unemployment rate dropped to 11.4% from 12.2% in March.

ECONOMIC GROWTH AND UNEMPLOYMENT

It is frequently assumed that more jobs are the answer to the problem of high unemployment in Alaska. Available data continue to unequivically demonstrate that this assumption is false. Economic development has increased Alaska's population and unemployment rate.

The table below compares changes in employment and the unemployment rate for the post-pipeline years.

Changes in Alaska Employment and Unemployment

	Percent Change in Annual Average Non-Agricultural Employment	Percentage Point Change in Average Annual Unemployment Rate
77-78	2.9	1.7
78-79	-1.8	-1.7
79-80	3.1	0.3
80-81	7.7	-0.3
81-82	7.7	0.8
82-83 1/	8.6	0.3

1/ Average of first four months for both years.

As the table indicates, in only one period (80-81) did an employment increase result in an unemployment rate decrease, and the decrease was very small. In all other periods, the unemployment rate varied directly, though not proportionally, with employment. Employment expansion increases the number of Alaskans, but not the proportion of employed Alaskans.

ANCHORAGE/MATSU

By Greg Huff

Labor Force

The Anchorage-MatSu region's unemployment rate declined nearly a full percentage point in April. The unemployment rate will continue to decline through the summer, but the degree of decline will depend on the rate at which job-seekers migrate into the Anchorage labor market. In-migration is influenced by the perceived high wages and job opportunites in Anchorage relative to the rest of the nation.

Anchorage Employment

Anchorage nonagricultural wage and salary employment in April increased by 2.9%, while the over-the-year growth in employment was 9.2%. All industry groups experienced monthly increases, with 70% of the growth concentrated among the construction, trade and services industries. Yearly employment gains were spread throughout the economy, with trade and services employment, which represent more than 40% of all jobs in Anchorage, accounting for nearly 60% of the yearly gains.

Services Employment

The services sector, comprised of a wide spectrum of businesses ranging from lodging and health care to business services and private education, accounts for nearly 22% of all nonagricultural wage and salary jobs in Anchorage. This concentration of jobs in the services industry was not always so prominent. A service will only be provided locally if the cost is less than the cost (including transportation) of importing the same service. Hence, some basic changes had to occur within the Anchorage economy for demand to reach levels supporting the number and diversity of services now provided. Services growth reflects increases in population and personal income. Services employment increased more than 200% from 1970 to 1980.

(Continued on page 14)

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK
ANCHORAGE

	P/	R/		CHANGES FROM:	
	4/83	**3/83**	**4/82**	**3/83**	**4/82**
Nonag. Wage & Salary	99800	97100	91450	2700	8350
Mining	4000	3750	3900	250	100
Construction	7300	6450	6700	850	600
Manufacturing	2200	2050	2050	150	150
Food & Kindred Prod.	300	250	400	50	-100
Other Mfg.	1900	1800	1650	100	250
Trans. Comm. & Util.	9300	9100	8650	200	650
Trucking & Whseing.	1450	1400	1300	50	150
Water Transportation	300	300	300	0	0
Air Transportation	3450	3350	3450	100	0
Other Transportation Comm. & Utilities	4100	4050	3600	50	500
Trade	24100	23650	20300	450	3800
Wholesale Trade	5450	5350	5100	100	350
Retail Trade	18650	18300	15200	350	3450
Gen. Merchandise	1850	1800	1650	50	200
Food Stores	2550	2450	2100	100	450
Eating & Drinking Places	6800	6800	5600	0	1200
Other Retail Trade	7450	7250	5850	200	1600
Finance-Ins. & R. Estate	6350	6200	5750	150	600
Services & Misc.	20900	20400	19500	500	1400
Government	25650	25500	24600	150	1050
Federal	9700	9700	9550	0	150
State	6550	6500	6300	50	250
Local	9400	9300	8750	100	650

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

LABOR FORCE BY REGION AND CENSUS DIVISION

	Labor Force			Unemployment			Rate			Employment		
	P	R		P	R		P	R		P	R	
	4/83	3/83	4/82	4/83	3/83	4/82	4/83	3/83	4/82	4/83	3/83	4/82
Alaska Statewide	215868	211724	203057	24593	25737	22462	11.4	12.2	11.1	191275	185987	180595
Anch.-Matsu Region	111921	109713	103383	10072	10713	8993	9.0	9.8	8.7	101849	99000	94390
Anchorage	100824	98643	93245	8414	8818	7602	8.3	8.9	8.2	92410	89825	85643
Matanuska-Susitna	11097	11070	10138	1658	1895	1391	14.9	17.1	13.7	9439	9175	8747
Gulf Coast Region	22638	22689	21772	3662	3776	3773	16.2	16.6	17.3	18976	18913	17999
Cordova	1147	1186	1105	131	174	142	11.4	14.7	12.9	1016	1012	963
Kenai	11783	12007	11182	2114	2370	2011	17.9	19.7	18.0	9669	9637	9171
Kodiak	4989	4700	4946	656	381	836	13.1	8.1	16.9	4333	4319	4110
Seward	1668	1684	1555	315	335	271	18.9	19.9	17.4	1353	1349	1284
Valdez	3051	3112	2984	446	516	513	14.6	16.6	17.2	2605	2596	2471
Interior Region	28562	27832	26449	4726	4413	3861	16.5	15.9	14.6	23836	23419	22588
Fairbanks	23276	22645	21573	3848	3557	3163	16.5	15.7	14.7	19428	19088	18410
Southeast Fairbanks	2257	2206	2137	308	291	290	13.6	13.2	13.6	1949	1915	1847
Upper Yukon	705	693	652	124	122	101	17.6	17.6	15.5	581	571	551
Yukon-Koyukuk	2324	2288	2087	446	443	307	19.2	19.4	14.7	1878	1845	1780
Northern Region	10552	10301	9923	980	935	867	9.3	9.1	8.7	9572	9366	9056
Barrow-North Slope	2731	2679	2619	149	153	176	5.5	5.7	6.7	2582	2526	2443
Kobuk	3340	3231	3129	369	324	319	11.0	10.0	10.2	2971	2907	2810
Nome	4481	4391	4175	462	458	372	10.3	10.4	8.9	4019	3933	3803
Southeast Region	31687	31005	30794	3962	4638	3629	12.5	15.0	11.8	27725	26367	27165
Angoon	432	423	442	65	74	82	15.0	17.5	18.6	367	349	360
Haines	1115	1137	1041	180	247	124	16.1	21.7	11.9	935	890	917
Juneau	11169	10822	10882	1104	1252	1022	9.9	11.6	9.4	10065	9570	9860
Ketchikan	6558	6503	6489	726	956	775	11.1	14.7	11.9	5832	5547	5714
Outer Ketchikan	880	868	848	193	215	175	21.9	24.8	20.6	687	653	673
Prince of Wales	1568	1578	1452	285	358	195	18.2	22.7	13.4	1283	1220	1257
Sitka	4614	4325	4569	548	458	585	11.9	10.6	12.8	4066	3867	3984
Skagway	1602	1607	1517	246	317	188	15.4	19.7	12.4	1356	1290	1329
Wrangell-Petersburg	3749	3742	3554	615	761	483	16.4	20.3	13.6	3134	2981	3071
Southwest Region	10508	10184	10736	1191	1262	1339	11.3	12.4	12.5	9317	8922	9397
Aleutian Islands	2724	2613	2778	190	187	223	7.0	7.2	8.0	2534	2426	2555
Bethel	3386	3273	3459	422	435	470	12.5	13.3	13.6	2964	2838	2989
Bristol Bay Borough	379	376	401	45	56	64	11.9	14.9	16.0	334	320	337
Bristol Bay	1375	1368	1409	124	170	147	9.0	12.4	10.4	1251	1198	1262
Kuskokwim	958	909	990	150	135	175	15.7	14.9	17.7	808	774	815
Wade Hampton	1686	1645	1699	260	279	260	15.4	17.0	15.3	1426	1366	1439

P/=Preliminary   1982 Benchmark

R/=Revised

Federal guidelines require the use of unrounded labor data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

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NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE/MATSU

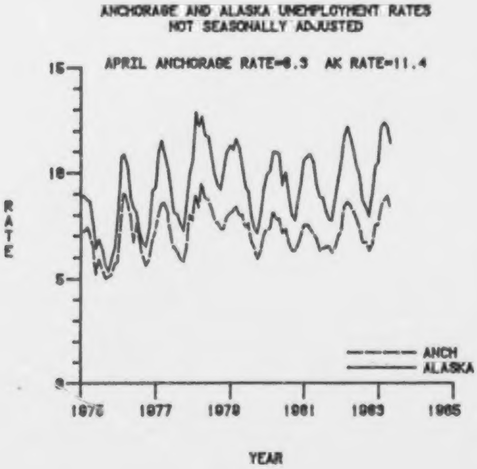
	P/ 4/83	R/ 3/83	4/82	CHANGES FROM: 3/83	 4/82
Nonag. Wage & Salary	104650	101500	95500	3150	9150
Mining	4200	3900	4000	300	200
Construction	7650	6700	6850	950	800
Manufacturing	2250	2100	2100	150	150
Trans. Comm. & Util.	9750	9450	9000	300	750
Trade	25000	24450	21100	550	3900
Finance-Ins. & R. Estate	6600	6450	5900	150	700
Services & Misc.	22200	21700	20400	500	1800
Government	27000	26750	26150	250	850

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

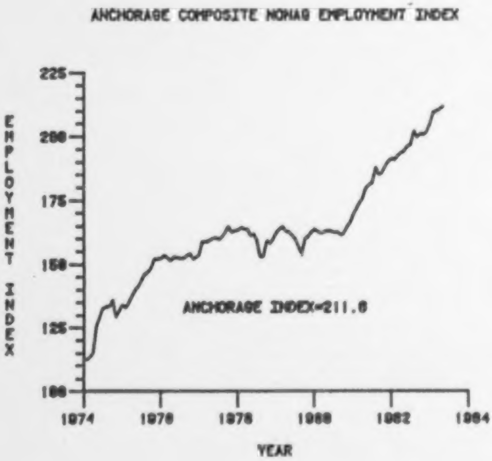
R/ Denotes revised estimates.



Services Employment for Selected Categories
1970-1982

	1970	1975	1980	1982
Services	6,400	13,300	16,900	19,900
Hotel, motel	756	1,345	1,691	2,122
Business Services	1,188	3,524	3,323	4,076
Health care	1,200	2.286	3,030	3,572
Social services	N/A	1,006	1,878	N/A
Membershipclub services	789	889	1,731	N/A
Misc. services (including engineering and security services)	605	1,392	1,706	N/A

The major catalyst for change of the Anchorage economy was the establishment of military bases in the Anchorage area and the discovery and extraction of oil in Kenai and the North Slope. These events caused population and total personal income increases which led to increased market size and import substitution. Anchorage grew to a point where a diverse range of services could be supported locally and exported to locations across the state.


ANCHORAGE COMPOSITE NONAG EMPLOYMENT INDEX

Services employment compared to total employment has increased from 12% in the early 1960s to 15% in 1970 and 22% by 1980. This shift, however, was not totally a result of Anchorage "growing up". The shift has been a nationwide pheonomenon as well. People and business have increased the utilization of older established services and are requiring new and specialized services.

Services Employment
Percent Share of Total Employment
Anchorage, Alaska, U.S.

	1964	1970	1975	1980
Anchorage	12.3	15.3	19.5	21.9
Alaska	9.6	13.2	16.2	17.7
U.S	14.9	16.4	18.2	19.8

FAIRBANKS/INTERIOR

By Neal Fried

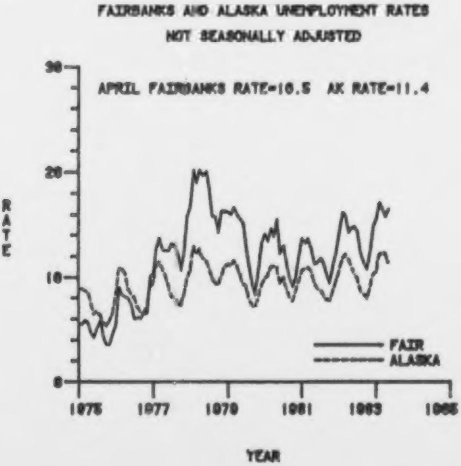
Layoffs

Though employment grew in Fairbanks in April, the figures were dimmed somewhat by the announcement of the combined loss of more than 100 jobs at Alascom and North Pole Refinery. The jobs lost at the refinery were immediate. Alascom's will be over a period of time, ending in October. Though these losses will hardly put a dent in Fairbanks' present employment statistics, the overall impact will be greater than the numbers indicate. Most of the jobs were well-paid, full-time, non-seasonal jobs and any loss of this type of employment in Fairbanks' seasonal economy is a blow.

Source of Fairbanks' Employment Growth

With a few exceptions, Fairbanks' economic indicators continue to chalk up gains. Banking deposits, building permits, and employment are all increasing. The process has been gradual, with no single project or industry responsible. Because there has been no highly visible project, such as the pipeline or a commercial construction boom, the source of this upswing has been a mystery to many. The stimulus providing this growth has emerged almost unnoticed.

The source of much of this stimulus has been State expenditures in the form of increased grants to local governments and schools, subsidized loan



NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
FAIRBANKS

	P/	R/		CHANGES FROM:	
	4/83	**3/83**	**4/82**	**3/83**	**4/82**
Nonag. Wage & Salary......	24100	23550	22900	550	1200
Mining	100	100	150	0	-50
Construction	1550	1400	1450	150	100
Manufacturing	400	400	400	0	0
Trans. Comm. & Util.	2800	2700	2650	100	150
Trucking & Whseing.	550	500	450	50	100
Air Transportation	600	600	600	0	0
Other Trans. Comm. & Utilities.................	1650	1600	1600	50	50
Trade	4750	4550	4300	200	450
Wholesale Trade	850	850	800	0	50
Retail Trade..............	3900	3700	3500	200	400
Gen. Merchandise & Apparel	450	400	350	50	100
Food Stores.............	700	700	650	0	50
Other Retail Trade	2750	2600	2500	150	250
Finance-Ins. & R. Estate ..	900	850	850	50	50
Services & Misc...........	4750	4650	4550	100	200
Government	8850	8900	8550	-50	300
Federal	2250	2350	2200	-100	50
State	3900	3900	3700	0	200
Local.....................	2700	2650	2650	50	50

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
INTERIOR

	P/ 4/83	*R/* 3/83	4/82	CHANGES FROM: 3/83	4/82
Nonag. Wage & Salary	27700	27150	25850	550	1850
Mining	300	300	300	0	0
Construction	1800	1700	1550	100	250
Manufacturing	450	450	400	0	50
Trans. Comm. & Util.	3500	3500	3400	0	100
Trade	5100	4750	4500	350	600
Finance-Ins. & R. Estate	950	900	850	50	100
Services & Misc.	5050	4950	4800	100	250
Government	10550	10600	10050	-50	500

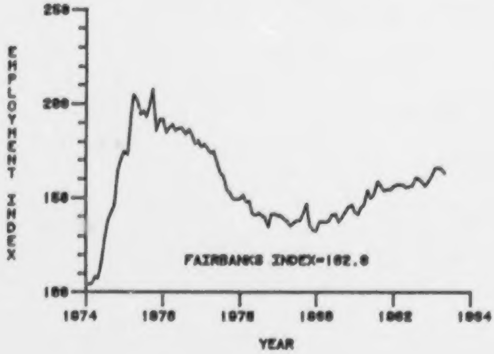
Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

FAIRBANKS COMPOSITE NONAG EMPLOYMENT INDEX



programs, income tax relief, permanent fund dividends, increased State and University employment, capital project spending, funding to non-profit groups and hiring of consultants. Increased disposable income and economic expansion have resulted. The simple repeal of the State income tax in 1980 would not have had this effect if oil revenue had not replaced income taxes.

Loan programs have also had an effect. Through the subsidization of interest rates, the State is effectively making cash outlays to individuals and firms. The loans, in most cases, stimulate already existing industries, but in some cases a subsidized loan program may provide the incentive to create new industries.

State spending has also increased State government and University employment. No total dollar amount can be easily calculated for these various programs. State spending as a stimulus of economic growth is important to consider in view of declining oil revenues.

It would be inaccurate to attribute all of Fairbanks' economic growth to State spending, however. Prudhoe Bay activity has been on the upswing during the past two years and will reach a peak this year. This has provided additional direct and indirect employment to Fairbanks residents. Fairbanks' growing population also has induced some of the economic growth taking place today.

GULF COAST

By Neal Fried

Employment

Gulf Coast's employment did not begin its usual spring surge but instead stayed even with March. Most of the region's industries posted gains, but seafood processing took an unusual downturn in April with 300 fewer jobs. Employment in this industry fell because the shellfish catch nearly halted in April. There was very little fishing activity in Kodiak, and only select fisheries open elsewhere in the region. The fisheries in many cases were closed earlier than normal, due in large part to the continued shortfalls that have plagued the region over the entire year.

The Herring Fishery

The brief herring season helped shore up some of the shellfish losses. This fishery lasts from a few hours in some areas to almost six weeks in Kodiak. The herring are harvested almost entirely for their roe, which ends up on dinner tables in Japan and Korea. Herring fisheries this year took place in Prince William Sound, Kodiak and upper Cook Inlet, with mixed results. Kodiak and upper Cook Inlet experienced better than average catches, while the Prince William Sound fishery was hampered by poor weather, causing their catch to fall 50% below last year. The prices were up this year, an extra bonus for those fisheries that had better than average catches, and helped to make up for some of the shortfall experienced in Prince William Sound.

It is difficult to estimate the number of people involved in the harvest, but according to the Alaska Department of Fish and Game, there were approximately 300 gill netters, set netters and seine boats in the region's fishery. Fish and Game also estimated that there were roughly 250-300 kelpers in the herring fishery. If the crews of the boats were counted, along with the tenders and spotting planes, there were well in excess of 1,200 people in the region involved in this very short fishery. This number would climb significantly if the fish processing workers were included, but there is no accurate method of separating the fish processing workers handling herring from those processing other species.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
GULF COAST

	P/	*R/*		CHANGES FROM:	
	4/83	**3/83**	**4/82**	**3/83**	**4/82**
Nonag. Wage & Salary	16350	16350	15500	0	850
Mining	850	900	900	-50	-50
Construction	1200	1100	950	100	250
Manufacturing	2150	2400	2150	-250	0
Food & Kindred Prod.	1400	1700	1400	-300	0
All Other Mfg.	750	700	750	50	0
Trans. Comm. & Util.	1900	1950	1750	-50	150
Trade	2500	2450	2350	50	150
Wholesale Trade	400	400	400	0	0
Retail Trade	2100	2050	1950	50	150
Finance-Ins. & R. Estate	450	450	400	0	50
Services & Misc.	2550	2450	2400	100	150
Government	4750	4650	4600	100	150
Federal	500	500	500	0	0
State	1400	1350	1350	50	50
Local	2850	2800	2750	50	100

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

SOUTHEAST ALASKA

By John Boucher

Southeast Alaska nonagricultural wage and salary employment increased to 27,850 jobs during April. The increase of 1,450 jobs represented a 5.3% growth in Southeast employment compared to March. A year to year comparison showed Southeast employment growth of 1,000 jobs since April of 1982. The increase represented 3.6% growth over last April.

The annual increase was largely due to activity in the construction and retail trade sectors, while the monthly increase was concentrated in the construction and manufacturing industries. Sitka and Ketchikan fish processing employment was boosted by an outstanding herring harvest early in the month. The lumber and paper sector also expanded employment

Construction was a heavy contributer to increased April employment. An estimated 400 jobs were added during the early spring. Construction activity in Southeast appears to be largely in Juneau, with new commercial construction leading the way. Construction will be a large contributer to employment in Southeast during the next several months, and retail trade should follow with increases as newly constructed business space becomes operable.

Looking at a year-to-year comparison, three industries accounted for most of the employment growth. Retail trade, construction and government all expanded, while manufacturing contracted. The contraction in manufacturing was due to the 750 fewer jobs in the lumber and paper products sector. This number is exaggerated due to a pulp mill being shutdown for part of the month.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
SOUTHEAST ALASKA

	P/	R/		CHANGES FROM:	
	4/83	**3/83**	**4/82**	**3/83**	**4/82**
Nonag. Wage & Salary......	28850	27400	27850	1450	1000
Construction	1900	1500	1350	400	550
Manufacturing	3700	2900	4050	800	-350
Food & Kindred Prod.....	1700	1050	1300	650	400
Lumber & Paper Prod....	1750	1600	2500	150	-750
All Other Mfg.	250	250	250	0	0
Trans. Comm. & Util.	2150	2150	2450	0	-300
Trade	4450	4400	3900	50	550
Wholesale Trade	200	250	250	-50	-50
Retail Trade..............	4250	4150	3650	100	600
Finance-Ins. & R. Estate ..	1050	1000	1000	50	50
Mining, Svcs. & Misc.	3550	3400	3450	150	100
Government	12050	12050	11650	0	400
Federal	2200	2200	2250	0	-50
State	6000	5950	5450	50	550
Local.....................	3850	3900	3950	-50	-100

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

HOURS AND EARNINGS

By Brit Harvey

The only significant change in March hours and earnings data was a decrease over the year in contract construction average weekly earnings. While other industries increased, as would be expected, construction showed a 6.2% decrease. The primary cause of the decline is fewer overtime hours worked this March than last. It is possible that wages for regular hours may also have declined, perhaps indicating more non-union construction. This can not be proven or disproven with these data. Future months where average weekly hours show less discrepency may provide more information concerning this issue.

ALASKA
HOURS AND EARNINGS
FOR
SELECTED INDUSTRIES 1/ 2/

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	p/ 3/83	r/ 2/83	3/82	p/ 3/83	r/ 2/83	3/82	p/ 3/83	r/ 2/83	3/82
MINING	$21.98	$22.54	$20.75	51.9	48.6	51.0	$1140.76	$1095.44	$1058.25
CONTRACT CONST.3/	23.50	23.89	22.12	41.6	40.1	47.1	977.60	957.99	1041.85
MANUFACTURING	13.06	13.41	12.55	35.6	32.8	34.3	464.94	439.85	430.47
Food & Kindred Prod.	8.75	8.57	8.40	31.1	27.1	28.0	272.13	232.25	235.20
Lumber & Paper Prod.	16.34	16.73	15.54	41.8	37.5	40.4	683.01	627.38	627.82
TRANS., COMM. & UTIL.	15.73	15.43	15.03	35.8	36.7	36.3	563.13	566.28	545.59
TRADE	9.70	9.71	9.62	34.8	34.4	33.4	337.56	334.02	321.31
Wholesale Trade	11.75	11.55	11.29	37.6	37.4	37.3	441.80	431.97	421.12
Retail Trade	8.83	8.93	8.84	33.8	33.3	31.9	298.45	297.37	282.00
FINANCE, INS. & R.E.	--	--	--	--	--	--	345.67	353.69	325.60

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor

2/ Excludes eating and drinking establishments

3/ Due to technical revision in construction sample, 1982 estimates are not strictly comparable to previous years data

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

8/3/83 SO320-1 A

JULY 1983
ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska

1 Employment in Computer Related Occupations

ALASKA ECONOMIC TRENDS

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U.S. Department of Labor

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U.S. Department of Labor

July 1983
Volume 3
Issue 7

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Alaska Economic Trends is published monthly by the Alaska Department of Labor, Research & Analysis Section, P.O. Box 1149, Juneau, Alaska 99802.

POSTMASTER: Send address change to ALASKA ECONOMIC TRENDS, P.O. BOX 1149, Juneau, Alaska 99802.

EMPLOYMENT IN COMPUTER-RELATED OCCUPATIONS

By Betsy Jensvold

Due to the explosive growth in the use of computers, interest has increased in computer-related occupations. Forecasts concerning the direct and indirect employment impacts of computers vary. Despite the fact that computers will impact a wide variety of occupations, five occupations can be identified which are most closely related to use of computers. These five occupations; systems analysts, computer programmers, computer operators, data entry clerks, and computer service technicians, are the primary focus of this article.

Systems Analysts design electronic data processing (EDP) systems. This involves analysis, planning and implementation of equipment (hardware) and program (software) aspects of an overall EDP system. Systems analysts should be able to think logically, work well with others, and deal effectively with abstract ideas.

Computer Programmers develop coded instructions that allow computers to accomplish EDP tasks. There are two types of programmers; systems programmers and applications programmers. Systems programmers write programs which provide computers with the general capability to do specific tasks. Applications programmers write programs which do specific tasks, such as print payroll checks or make scientific calculations. The abilities required in programming are similar to those required of systems analysts.

Computer Operators run computers and peripheral equipment. This involves loading of input media, such as tapes, disks and cards, monitoring the system, and solving any operating problems which occur. This occupation requires mechanical and reasoning abilities.

Data Entry Clerks use equipment such as CRT terminals and keypunch machines to convert data into forms which can be used by EDP systems. Manual dexterity and tolerance for stress, monotony and noise are important.

Computer Service Technicians install and service EDP equipment. They must have thorough technical knowledge of EDP equipment, mechanical ability, and be able to work independently.

Education and Training

Minimum Entry Requirements

Systems Analysts: Although requirements vary, a bachelor's degree with courses in computer science is generally the minimum requirement. Related work experience and/or a graduate degree may be required by some employers.

Computer Programmers: There are no universal requirements. Most programmers are college graduates. Engineering and scientific applications usually require a degree in computer science. Experience and/or education in the field in which the programmer is working (accounting, statistics, etc.) is helpful. Individuals interested in computer programming should choose a field in advance and train appropriately.

Computer Operators and Data Entry Clerks: High school graduation is the minimum educational requirement. Formal training is desirable because most employers look for applicants who are already skilled in operating data entry equipment or computer consoles. Employers generally prefer computer operators who have some community or junior college education, although they provide additional training on the job.

Computer Service Technicians: Employers usually require applicants to have one to two years of post-high school training in basic electronics or electrical engineering from a computer school, technical institute, junior college, or four-year college. A few technicians are trained through apprenticeship programs or the Armed Forces.

Educational Programs in Alaska

Alaska has few computer science programs, compared to other states. A certificate in data processing is available from the University of Alaska Juneau (UAJ). This program requires about one year to complete (34 semester hours). A two-year associate degree program is available at Anchorage Community College (ACC). Fairbanks' (UAF) associate degree program is being phased out and only those who are already enrolled in it are being allowed to complete it. Four-year bachelor's degree programs are available at UAF and the UA Anchorage (UAA). Both programs are new. Additionally, UAJ offers a Bachelor's of Business Administration with an emphasis in computer information systems. This program is entering its third year. No graduate degree programs are currently available in the field of computer science in Alaska.

Alaska Supply Information

Few people have completed computer science degree or certificate programs in Alaska, although the numbers are increasing. The table on page 7 shows the number of people who have been awarded such degrees anywhere within the state between 1978-79 and 1982-83. Although the numbers are low, there are several additional factors which must be taken into account. First, it must be recognized that all three bachelor's degree programs are fairly new. Second, more people receive training than complete degrees. In fact it is quite possible that some people leave school before completing their degree precisely because of the fact that their training has made them employable. Third, and possibly most important, is the fact that these numbers do not show how many people include computer training as part of another degree program.

There is, and will continue to be, a demand for people trained at all levels—from certificate programs through graduate education. Until enrollments have increased significantly and programs have been added at the graduate level, Alaska will continue to depend on workers trained out of state.

Continuing Education

Anyone planning to enter the computer field should be aware that due to the extremely rapid rate of change in the industry, continuing education and training is a necessity. Employers may sponsor training for their employees, or individuals may need to pursue it on their own.

United States Supply Information

Nationally, the number of computer and information science programs offered at every degree level more than doubled over the period from 1966-67 to 1978-79. Associate degree programs grew 225%. Bachelor's degree programs grew 554%. Master's degree programs grew 162%, and Ph.D. progams grew 117%. Numerous vocational schools sprang up or added programs to handle the demand.

The number of persons receiving degrees in the computer sciences also increased sharply. From 1970-71 to 1977-78, the total number of bachelor's, master's, and doctoral degrees in these fields grew 194% (from 4,104 to 12,060). The number of associate degrees fluctuated considerably during the 70's, ranging from 6,821 in 1974-75 to 10,833 in 1978-79. The number trained by vocational schools is not available.

According to the U.S. Bureau of Labor Statistics, even with the increases which have occurred over the last 15 years, graduates of programs in computer science are only filling 1 out of 6 jobs at the bachelor's level, 1 out of 11 jobs at the master's level, and 1 out of 4 at the doctoral level. Obviously the remainder of these jobs are being filled by someone. The most likely explanation is that people in other fields, but with some background in computer science, are filling the gap.

United States Employment Forecast

Computer occupations are expected to be the most rapidly growing occupational group in the economy over the next decade. Overall

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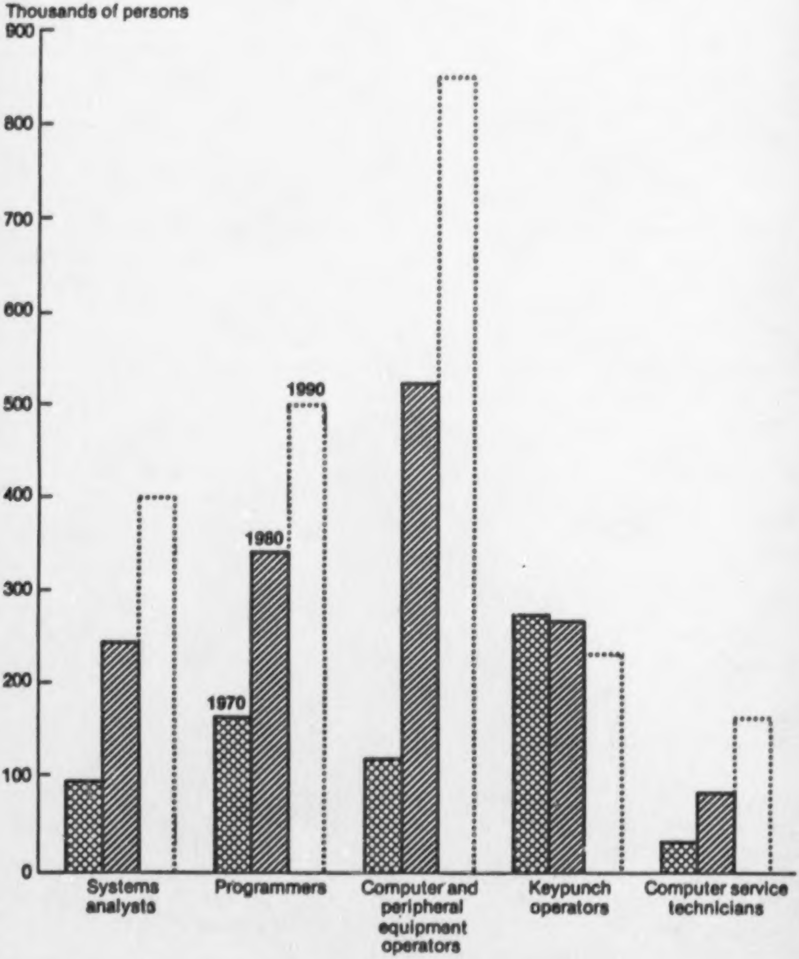
Figure 1
U.S. Employment in Computer Occupations
1970, 1980 and Projected 1990



Source: U.S. Department of Labor, Bureau of Labor Statistics.

employment in computer occupations is expected to rise from 1,455,000 in 1980 to 2,140,000 in 1990, a 47% increase. This is nearly three times as fast as the expected rate of growth for all occupations.

Among the five major computer occupations, computer service technicians will have the fastest rate of growth, and computer and peripheral equipment operators will have the greatest actual growth. Systems analysts are expected to increase 65%, programmers by 47%, computer and peripheral equipment operators by 63%, and computer service technicians by 93%. Only keypunch operators can expect a decline (14%). See figure below.

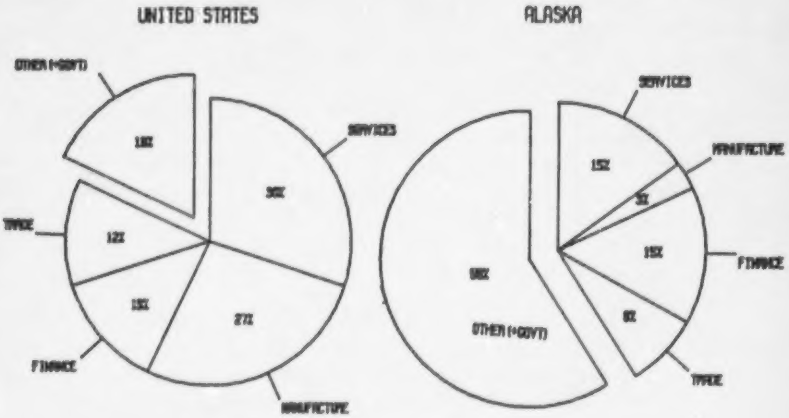
The industrial distribution of employment and the current geographic distribution of jobs in computer related fields provide additional insight. Although computer workers are found in every major industry, 80% work in four major industry divisions: services; manufacturing; wholesale and retail trade; and finance, insurance and real estate. This broad dispersion of computer occupations throughout the economy provides job stability.

Geographically, there is a high correlation between the distribution of computers and employment in computer occupations. Computer systems tend to be geographically concentrated. In fact, the 25 largest computer markets account for about 56% of the total value of computer systems, and the top 100 markets constitute 84% of the total. Consequently, persons planning a career working with computers should expect to work in or near a metropolitan area.

Alaska Employment Forecast

Computer occupations face a bright future in Alaska as well as in the rest of the nation. However, it is important to keep in mind the small number employed in these occupations. In 1980 there were only 250-350 people employed in each of the following occupations: systems analysts, computer programmers, computer operators, and data entry clerks. Together they represent only 0.6% (or 6 out of 1,000) of the total wage and salary employment in the state—only one-fifth the number of people employed as elementary and secondary school teachers in Alaska.*1/*

Important distinctions exist between the distribution of employment in Alaska compared to the rest of the nation. The four industries which provide 80% of the employment nationwide provide only 40% of the employment in Alaska. Also, whereas government employment is relatively insignificant nationwide, it provides 40% of the Alaska computer-related employment. Almost 60% of employment is located in Anchorage and another 20% is located in either Fairbanks or Juneau. Therefore, even in Alaska, most computer-related employment will be in one of the three major cities.



Emerging Occupations

There are a few occupations for which an extremely bright future has been predicted. These "emerging occupations," such as robotics technicians, have drawn public attention and created a level of interest which is out of proportion to their actual employment potential. It is important to understand that even nationally, the openings which these occupations are expected to provide are small in comparisons to the opportunities expected in any large, established occupation. In Alaska, they will have an even smaller impact.

Conclusion

Most computer-related occupations, despite the very rapid growth projected for them, have relatively few job openings because of their relatively small size and low separation rates.

On a nationwide basis, computer service technicians, the fastest growing computer occupation, is expected to have only 11% as many openings as carpenters and 13% as many as automobile mechanics. Programmers and systems analysts combined will have fewer openings than either accountants or kindergarten and elementary school teachers. Computer operators, because of their larger number and higher separation rate, will have many more openings.

In Alaska, computer-related employment represents a much smaller proportion of total employment than it does nationally. Therefore, the number of employment opportunities in computer occupations are expected to be proportionately smaller. Still, adequately trained individuals will encounter good employment prospects.

Computer-Related Certificates and Degrees Completed in Alaska

	78-79	79-80	80-81	81-82	82-83
Certificate Programs:					
University of Alaska Juneau			*	-	n/a
Associate Degree Programs:					
Anchorage Community College	1	11	5	14	19
University of Alaska Fairbanks**	3	3	1	13	14
Bachelor's Degree Programs:					
University of Alaska Anchorage					*
University of Alaska Fairbanks				*1	3
University of Alaska Juneau				*	-

* First year of program.
** This program has been discontinued.

Source: Office of Institutional Planning, University of Alaska, Statewide System of Higher Education.

Further information about computer occupations and their national employment outlook can be found in the following Bureau of Labor Statistics publications:

Occupational Outlook Quarterly
U.S. Department of Labor, BLS
Summer 1981

Employment Trends in Computer Occupations
U.S. Department of Labor, BLS
Bulletin 2101, October 1981

Alaskan specific occupational information is available through the Alaska Career Information System (AKCIS). This is a computer-based interactive system which integrates localized occupational and educational information. The Occupational Data System (ODS) is being developed as a component of AKCIS, and is intended primarily for use by administrators and program planners. AKCIS gives programs of study and training available in all authorized post-secondary schools in Alaska and essentially all four-year colleges, universities, and graduate and professional schools in the nation.

AKCIS currently covers 245 occupations, and supplementary ODS information has been developed for approximately 70 occupations. The sort of information which is available includes a narrative description of job duties, working conditions, wages, employment outlook, methods of preparing for the occupation, tabular data on the major industries, required training levels, wages, employment trends, and employment forecast. Some localized information is available for wages, employment trends, and employment forecast. Additional features enable one to sort through the occupations on the basis of occupational characteristics and labor market data, to locate additional reference materials, and to obtain monthly economic data for Alaska.

For information about AKCIS and whether it is already available in your local area contact:

Dick Wilson, User Services Coordinator
Alaska Career Information System
Pouch F
Juneau, Alaska 99811
(907) 465-2980

1/ *New occupational employment estimates will be available in September.*

ALASKA

By Brit Harvey

Oil Price Impacts

A measure of stability has returned to the world oil market following a chaotic winter of OPEC negotiations and a $5/barrel price decline. Most analysts feel the $29/barrel OPEC benchmark price is still above the price that would prevail in an open market. This indicates that OPEC's cartel power, while clearly diminished, has not disappeared. The price gyrations of the last two years have rocked the oil industry worldwide. In Alaska, the impact has been mixed, with various segments of the industry displaying different responses.

Alaska Oil Industry Composition

The Alaska oil industry can be broken down into three major sectors; producers, drillers, and oil field service firms. Producers, such as Sohio and Arco, contract with other firms to provide drilling and oil field services, such as geophysical/seismic exploration, providing drilling mud, and well logging.

During the 1982 winter drilling season, producers accounted for about 30% of oil and gas industry employment, drilling firms about 20%, and service firms the remaining 50%. Some service firm employment is related to drilling, with the rest related to exploration and production.

Drilling-Related Impacts

Drilling has diminished markedly in Alaska during the past year due to lower oil prices and declining requirements for new North Slope production wells. Employment has been negatively affected by the introduction of newer, more efficient rigs. With fewer wells being drilled (156 North Slope development wells in 1983, versus 185 in 1982), and less time required to drill each well, drilling contractors and drilling-related oil field service firms have laid off employees. This trend is expected to continue through 1984. Contractors are counting on Beaufort Sea exploration and development to turn the trend around and put to work some of the 26 rigs currently stacked in Alaska.

Despite the decline in oil prices and drilling, Alaska oil and gas employment has remained relatively stable. The reason is that producers and exploration/production related services firms have increased employment, almost compensating for drilling-related layoffs.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA

	P/	*R/*		CHANGES FROM:	
	5/83	4/83	5/82	4/83	5/82
Nonag. Wage & Salary	211200	204600	192100	6600	19100
Mining	10000	9900	8900	100	1100
Construction	17700	15900	13900	1800	3800
Manufacturing	11000	9300	10800	1700	200
Food & Kindred Prod.	5300	4000	4800	1300	500
Lumber & Paper Prod.	2700	2500	3300	200	-600
All Other Mfg.	3000	2800	2700	200	300
Trans. Comm. & Util.	20100	18900	18100	1200	2000
Trucking & Whseing.	2700	2700	2500	0	200
Water Transportation	2100	1600	1200	500	900
Air Transportation	6000	5600	5600	400	400
Other Trans. Comm. & Utilities	9300	9000	8800	300	500
Trade	40100	39100	34900	1000	5200
Wholesale Trade	8000	7800	7000	200	1000
Retail Trade	32100	31300	27900	800	4200
Gen. Merchandise & Apparel	4700	4600	4000	100	700
Food Stores	5500	5400	4600	100	900
Eating & Drinking Places	11200	10900	10100	300	1100
Other Retail Trade	10700	10400	9200	300	1500
Finance-Ins. & R. Estate	10200	9900	9500	300	700
Services & Misc.	37500	37000	34500	500	3000
Government	64600	64600	61500	0	3100
Federal	18500	18100	17700	400	800
State	18400	19100	17500	-700	900
Local	27700	27400	26300	300	1400

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

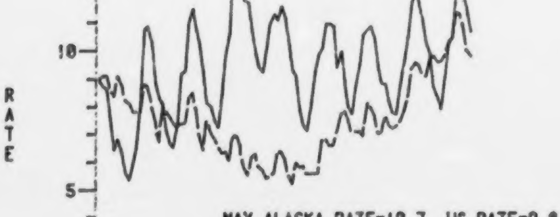
R/ Denotes revised estimates.

Producer Sector

While drilling-related employment is sensitive to short-term fluctuations in oil prices and industry earnings, employment by Alaska producer firms is influenced more by long-term considerations. Although the employment decisions of producer firms vary, a look at several producers shows why producer employment has generally increased despite the slump in oil prices and drilling.

Sohio is Alaska's largest producer, with about a 50% share of Prudhoe Bay production. With Alaska North Slope crude worth about $27/barrel delivered to refineries in the lower-48, and combined production and transportation costs of $11 to $13/barrel, Sohio realizes a huge profit on its majority share of Prudhoe Bay. Not surprisingly, Sohio is the most profitable major U.S. oil corporation, and is ideally positioned to remain profitable despite oil price declines or foreign crude cut-offs.

Like the State of Alaska, however, Sohio faces the coming decline in Prudhoe Bay production, where 96.7% of its reserves lie. Prudhoe Bay is expected to begin a rapid production decline in about four years, a short time by oil industry standards. If Sohio is to avoid a return to its humble origins as a local refiner and marketer, it must translate its immense


ALASKA AND US UNEMPLOYMENT RATE
NOT SEASONALLY ADJUSTED

Prudhoe Bay cash flow into new reserves of at least somewhat comparable size. This means searching for giant fields in frontier areas such as the Beaufort Sea. In view of its overwhelming corporate need to search for new reserves, and its financial ability to do so, Sohio is unlikely to be deterred in its Alaska exploration and development by oil price changes.

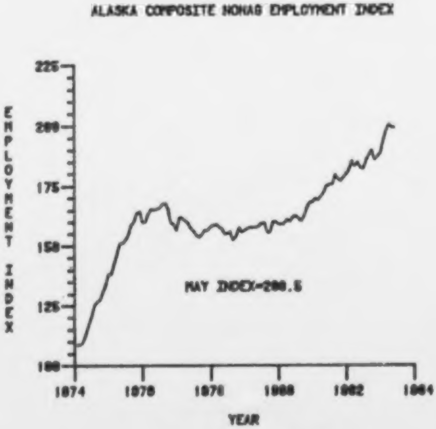
In addition to Sohio, other major oil corporations, including Shell and Texaco, bid heavily for Beaufort Sea leases. Their follow-up efforts are likely to create in-state employment.

Not all corporations taking the plunge in Beaufort Sea leases are major multi-nationals. Diamond Shamrock, a former chemical producer now metamorphosed into an energy company, bid with Texaco, Placid Oil and Amerada Hess on several prime tracts. While the $161 million bid by Diamond Shamrock was certainly not a "you bet the company" event, Diamond Shamrock clearly hopes that the Beaufort Sea will catapult the corporation into the big-time of vertically integrated energy corporations. Employment in Alaska is likely to mirror this corporate investment.

Nonagricultural Employment

Alaska nonagricultural wage and salary employment increased during May by 3.2%, or 0.6% when seasonally adjusted. The growth over the year was a feverish 9.9%.

Construction continued to pace employment growth. Although the seasonally adjusted May increase was not large, the year-to-year expansion was 27.3%. In the three years since May 1980, construction employment has increased by more than 65%, or 18.3% compound annual growth. Many



construction firms and workers have been drawn to Alaska by boom growth. Many will be leaving in 1984, but probably not enough to prevent rising unemployment in the construction trades next year.

The only sector showing an employment decrease during May was State government, due to seasonal layoffs by the University of Alaska.

Unemployment

Unemployment during May was 10.7%, down from 11.4% in April. Unemployment remains significantly above last year, when the May rate was 10.3%. The national May rate comparable to Alaska's was 9.8%. May data confirm the trends of the past year; rapid employment expansion, rapid in-migration of job seekers, and slightly higher unemployment rates.

ANCHORAGE-MATSU

By Greg Huff

Labor Force

In response to seasonal forces, the Anchorage-Matsu regional unemployment rate in May fell for the second consecutive month. May's rate was 6 tenths of a percentage point below April's. Unfortunately the rate remains above year-ago levels. Despite rapid economic expansion, the labor force is growing at a faster pace than employment, leaving a higher percentage of the labor force unemployed.

Although Alaska and Anchorage have experienced an expansionary economic period, Alaska's unemployment rate continues to rank 11th highest among states. Anchorage, Alaska's only Standard Metropolitan Statistical Area (SMSA), ranked 137 in April among some 240 other SMSAs nationwide. The highest unemployment rate for April was in Johnstown, Pennsylvania (24.4%) and the lowest was in Austin, Texas (3.8%).

Nonagricultural Employment

Anchorage's nonagricultural wage and salary employment was 101,800 in May. This figure was 2.3% above April, 7.8% higher than last year and represented 48% of employment statewide.

All industries and government experienced over-the-month increases in employment except oil. Oil employment historically remains flat during the month of May. Construction employment surged forward, making up 40% of the over-the-month increases.

Manufacturing Employment

Manufacturing in Anchorage represented 2.4% of total employment in 1982. This compares with 5.7% statewide and 20.7% nationally.

Manufacturing Employment
Percentage Share of Total Employment
Selected Years

	Anchorage	Alaska	U.S.
1970	2.4	8.4	27.3
1975	2.3	6.0	23.8
1980	2.2	7.9	22.4
1982	2.4	5.7	20.4

LABOR FORCE BY REGION AND CENSUS DIVISION

	Labor Force			Unemployment			Rate			Employment		
	P	*R*		*P*	*R*		*P*	*R*		*P*	*R*	
	5/83	4/83	5/82	5/83	4/83	5/82	5/83	4/83	5/82	5/83	4/83	5/82
Alaska Statewide	221587	216476	206459	23684	24602	21357	10.7	11.4	10.3	197903	191874	185102
Anch.-Matsu Region	114469	112137	105102	9664	10073	8642	8.4	9.0	8.2	104805	102064	96460
Anchorage	103244	101020	94912	8152	8415	7391	7.9	8.3	7.8	95092	92605	87521
Matanuska-Susitna	11225	11117	10190	1512	1658	1251	13.5	14.9	12.3	9713	9459	8939
Gulf Coast Region	24357	22749	22775	3705	3665	3274	15.2	16.1	14.4	20652	19084	19501
Cordova	1266	1153	1159	160	131	115	12.6	11.4	9.9	1106	1022	1044
Kenai	12601	11840	11765	2078	2116	1829	16.5	17.9	15.5	10523	9724	9936
Kodiak	5398	5015	5147	682	657	694	12.6	13.1	13.5	4716	4358	4453
Seward	1830	1677	1619	357	316	228	19.5	18.8	14.1	1473	1361	1391
Valdez	3262	3064	3085	428	445	408	13.1	14.5	13.2	2834	2619	2677
Interior Region	29210	28603	27091	4559	4728	3935	15.6	16.5	14.5	24651	23875	23156
Fairbanks	23867	23310	22158	3774	3850	3284	15.8	16.5	14.8	20093	19460	18874
Southeast Fairbanks	2273	2260	2160	258	308	267	11.4	13.6	12.4	2015	1952	1893
Upper Yukon	729	706	658	128	124	93	17.6	17.6	14.1	601	582	565
Yukon Koyukuk	2341	2327	2115	399	446	291	17.0	19.2	13.8	1942	1881	1824
Northern Region	10878	10604	9765	995	981	851	9.1	9.3	8.7	9883	9623	8914
Barrow-North Slope	2847	2745	2581	181	149	177	6.4	5.4	6.9	2666	2596	2404
Kobuk	3453	3356	3077	386	370	311	11.2	11.0	10.1	3067	2986	2766
Nome	4578	4503	4107	428	462	363	9.3	10.3	8.8	4150	4041	3744
Southeast Region	31855	32100	30429	3676	3967	3136	11.5	12.4	10.3	28179	28133	27293
Angoon	431	437	411	58	65	50	13.5	14.9	12.2	373	372	361
Haines	1140	1130	1055	189	181	134	16.6	16.0	12.7	951	949	921
Juneau	11367	11317	10838	1138	1104	930	10.0	9.8	8.6	10229	10213	9908
Ketchikan	6684	6646	6428	756	728	687	11.3	11.0	10.7	5928	5918	5741
Outer Ketchikan	865	890	858	167	193	182	19.3	21.7	21.2	698	697	676
Prince of Wales	1556	1587	1403	252	285	140	16.2	18.0	10.0	1304	1302	1263
Sitka	4498	4675	4489	365	549	486	8.1	11.7	10.8	4133	4126	4003
Skagway	1566	1622	1487	188	246	152	12.0	15.2	10.2	1378	1376	1335
Wrangell-Petersburg	3748	3796	3460	563	616	375	15.0	16.2	10.8	3185	3180	3085
Southwest Region	10818	10283	11297	1085	1188	1519	10.0	11.6	13.4	9733	9095	9778
Aleutian Islands	2819	2662	2881	172	189	222	6.1	7.1	7.7	2647	2473	2659
Bethel	3522	3315	3672	426	422	561	12.1	12.7	15.3	3096	2893	3111
Bristol Bay Borough	388	371	408	39	45	57	10.1	12.1	14.0	349	326	351
Bristol Bay	1417	1345	1471	110	124	158	7.8	9.2	10.7	1307	1221	1313
Kuskokwim	964	938	1039	120	149	191	12.4	15.9	18.4	844	789	848
Wade Hampton	1708	1652	1826	218	259	330	12.8	15.7	18.1	1490	1393	1496

P/=Preliminary 1982 Benchmark

R/=Revised

Federal guidelines require the use of unrounded labor data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE

	P/	*R/*		CHANGES FROM:	
	5/83	**4/83**	**5/82**	**4/83**	**5/82**
Nonag. Wage & Salary	101800	99550	94450	2250	7350
Mining	4050	4050	3950	0	100
Construction	8150	7250	7900	900	250
Manufacturing	2500	2200	2300	300	200
Food & Kindred Prod.	450	300	450	150	0
Other Mfg.	2050	1900	1850	150	200
Trans. Comm. & Util.	9500	9150	9050	350	450
Trucking & Whseing.	1400	1400	1350	0	50
Water Transportation	450	300	400	150	50
Air Transportation	3600	3450	3600	150	0
Other Trans. Comm. & Utilities	4050	4000	3700	50	350
Trade	24350	24000	20950	350	3400
Wholesale Trade	5550	5450	5200	100	350
Retail Trade	18800	18550	15750	250	3050
Gen. Merchandise	1850	1850	1650	0	200
Food Stores	2600	2550	2100	50	500
Eating & Drinking Places	6850	6800	5850	50	1000
Other Retail Trade	7500	7350	6150	150	1350
Finance-Ins. & R. Estate	6450	6350	6000	100	450
Services & Misc.	21050	20850	19950	200	1100
Government	25750	25700	24350	50	1400
Federal	9700	9700	9750	0	-50
State	6600	6550	5900	50	700
Local	9450	9450	8700	0	750

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

Five major sectors constitute most of Anchorage's manufacturing industry. The largest is the printing and publishing industry, providing 930 jobs during the first half of 1982. Newspapers provide the majority (65%) of the jobs in the printing and publishing industry.

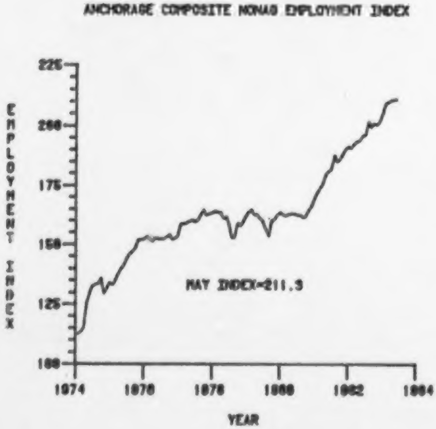
Major Manufacturing Sectors by Number of Firms and Employment

		1970		1975		1980		1982 1/
	Firms	Emp.	Firms	Emp.	Firms	Emp.	Firms	Emp.
Food & Kindred Products	11	199	15	331	29	370	33	422
Lumber & Wood Products	7	45	13	148	10	142	10	172
Printing & Publishing	19	342	31	485	35	711	42	926
Stone, Clay & Glass Prod.	10	226	9	262	7	140	7	171
Metal Fabrication	1	•	7	113	8	117	11	167
Other Manufacturing	26	•	45	235	47	133	47	255
Total Manufacturing	74	1018	120	1574	136	1613	150	2113

• Non-disclosable

1/ 1982 first half year data only.

The next largest manufacturing sector in Anchorage is the food processing industry which is comprised of seafood processing and other food processing industries such as bakeries, dairy products and feeds. Fish processing is a very volatile industry with employment peaking over 800 in mid-summer and as low as 30 in the off-season.



NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK ANCHORAGE-MATSU

	P/ 5/83	*R*/ 4/83	5/82	CHANGES FROM: 4/83	5/82
Nonag. Wage & Salary	106650	104400	98200	2250	8450
Mining	4250	4200	4050	50	200
Construction	8550	7600	8100	950	450
Manufacturing	2550	2250	2400	300	150
Trans. Comm. & Util.	10000	9700	9250	300	750
Trade	25150	24900	21700	250	3450
Finance-Ins. & R. Estate	6700	6600	6150	100	550
Services & Misc.	22400	22150	20650	250	1750
Government	27050	27000	25900	50	1150

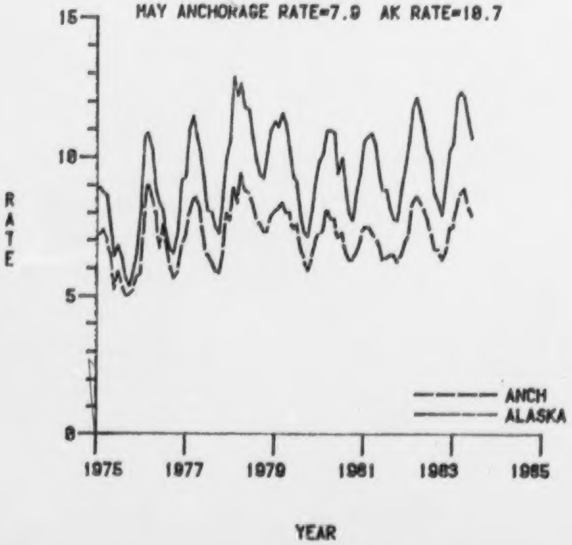
Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

ANCHORAGE AND ALASKA UNEMPLOYMENT RATES
NOT SEASONALLY ADJUSTED



FAIRBANKS/INTERIOR

By Neal Fried

Employment Continues to Grow

The Fairbanks economy continued to grow, with wage and salary employment up 5% over last year. Almost all industries contributed to employment growth, with trade, construction and services making the largest contributions.

Construction growth comes from activity in public capital projects, residential construction, and commercial construction, which appears to be experiencing a particularly strong year after many slow years. A variety of commercial construction projects are planned for this season; including two small retail business malls and a number of office buildings. This construction comes primarily as a result of expansion of the trade and services industries.

Trade has increased its share of total employment in Fairbanks over the decade, growing from 17% to 19%. The number of firms has grown from 300 to 410. This is the result of increasing population and personal income. Fairbanks' per capita income has increased by 13% in real terms over the past decade, providing more to spend in the trade industry. This spurred the growth of retail outlets. As the trade industry grows, fewer items will be purchased outside of Fairbanks, providing additional stimulus to the industry and the local economy.

The service industry's story is similar. Services is Fairbanks' largest private sector industry, employing 20% of Fairbanks' work force. It is the most broadly defined, including such diverse services as hotels, medical, legal, entertainment, non-profit organizations and business services.

Over the past year employment in the services industry has grown 5%. Over the decade it has the distinction of being the most rapidly growing industry. The number of service firms has grown from 284 a decade ago to 450 today. This rapid increase is a nationwide phenomenon.

Like trade, service growth has come as a result of rising incomes and a growing population. The service and trade industries also receive stimulus from growth outside Fairbanks. Communities throughout the rural Interior and northern part of the state (including Prudhoe Bay) have also grown, increasing their purchases of goods and services from Fairbanks, the center of commerce north of the Alaskan range.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
FAIRBANKS

	P	R/		CHANGES FROM:	
	5/83	4/83	5/82	4/83	5/82
Nonag. Wage & Salary	24450	24100	23650	350	800
Mining	150	100	150	50	0
Construction	1850	1550	1750	300	100
Manufacturing	450	450	400	0	50
Trans. Comm. & Util.	2850	2800	2800	50	50
Trucking & Whseing.	550	550	500	0	50
Air Transportation	650	650	650	0	0
Other Trans. Comm. & Utilities	1650	1600	1650	50	0
Trade	4750	4700	4550	50	200
Wholesale Trade	850	850	850	0	0
Retail Trade	3900	3850	3700	50	200
Gen. Merchandise & Apparel	450	450	400	0	50
Food Stores	700	700	700	0	0
Other Retail Trade	2750	2700	2600	50	150
Finance-Ins. & R. Estate	900	900	850	0	50
Services & Misc.	4850	4750	4750	100	100
Government	8650	8850	8400	-200	250
Federal	2300	2250	2250	50	50
State	3650	3900	3500	-250	150
Local	2700	2700	2650	0	50

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
INTERIOR

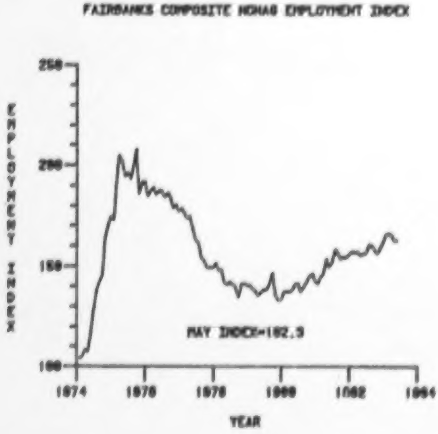
	P/	*R/*		CHANGES FROM:	
	5/83	4/83	5/82	4/83	5/82
Nonag. Wage & Salary	28450	27650	26700	800	1750
Mining	350	300	350	50	0
Construction	2200	1800	1750	400	450
Manufacturing	500	500	400	0	100
Trans. Comm. & Util.	3700	3500	3600	200	100
Trade	5250	5050	4700	200	550
Finance-Ins. & R. Estate	950	950	900	0	50
Services & Misc.	5100	5050	5000	50	100
Government	10400	10500	10000	-100	400

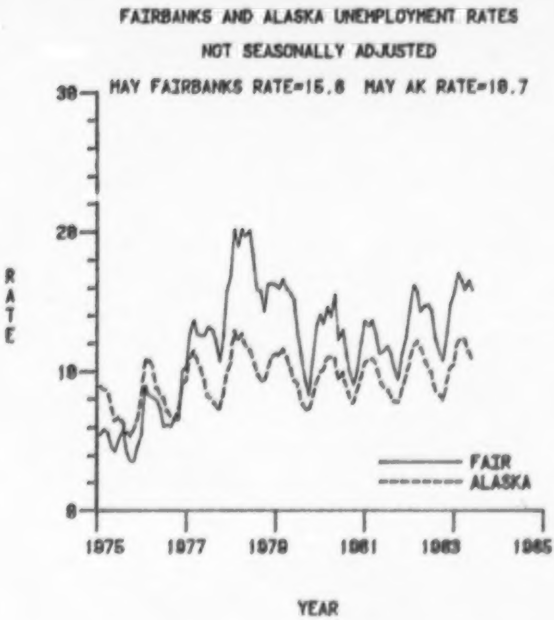
Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.





FAIRBANKS AND ALASKA UNEMPLOYMENT RATES

NOT SEASONALLY ADJUSTED

MAY FAIRBANKS RATE=15.8 MAY AK RATE=10.7

GULF COAST

By Neal Fried

Unemployment

Gulf Coast's unemployment rate continued to edge downwards in May, falling to 15.2%. The rate remains above a year-ago despite employment growth.

This persistent high rate of unemployment is a result of many factors. 1) A large percentage of the labor force only works part of the year, due to the seasonality of seafood processing and tourism which are major industries in the region. 2) Most of the communities' economies found within the region are small, lack much economic diversification, and therefore do not offer a wide variety of job opportunities. 3) Many of the communities such as Kenai, Soldotna, Seward, and Homer are accessible by roads and are considered very desirable places to live, causing continued pressure from migration from elsewhere in the state and country.

Employment Growth Continues

On the bright side, employment continues on the upswing and is registering major gains. The salmon season got underway in May and herring were still being harvested, helping to buoy fish processing employment. Fish processing grew by 900 over the month and for the second month this year made gains over 1982's level. All other major industry categories have posted over-the-year gains, with most industries contributing to May's growth. Employment growth continued at a healthy 5% rate. This trend is not expected to change during the remainder of this year.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
GULF COAST

				CHANGES FROM:	
	P/	*R/*			
	5/83	4/83	5/82	4/83	5/82
Nonag. Wage & Salary	17800	16400	16800	1400	1000
Mining	900	850	850	50	50
Construction	1400	1200	1300	200	100
Manufacturing	3050	2150	2850	900	200
Food & Kindred Prod.	2300	1400	2050	900	250
All Other Mfg.	750	750	800	0	-50
Trans. Comm. & Util.	1950	1950	1750	0	200
Trade	2650	2500	2550	150	100
Wholesale Trade	450	400	450	50	0
Retail Trade	2200	2100	2100	100	100
Finance-Ins. & R. Estate	500	450	400	50	100
Services & Misc.	2600	2550	2500	50	100
Government	4750	4750	4600	0	150
Federal	500	500	500	0	0
State	1400	1400	1350	0	50
Local	2850	2850	2750	0	100

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

SOUTHEAST

By John Boucher

Southeast nonagricultural wage and salary employment contracted slightly during May. Although most industries posted gains, declines of 700 jobs in seafood processing and 250 jobs in state government resulted in the overall contraction.

The monthly decline in seafood processing was due to layoffs following April's strong herring season rather than any underlying changes in the industry. This volatility is normal. The outlook for seafood processing in Southeast is not good. Canneries in Wrangell and Juneau have announced they will not operate this summer due to a weak canned salmon market.

The state government employment decline was a normal seasonal result of layoffs by the University of Alaska.

Construction continued to expand, with work on a new boat harbor and sewer project in Sitka contributing. Juneau voters approved a sales tax increase to fund a water project and several other capital improvements. Work should commence later this summer on some projects with the bulk of the work occurring in 1984.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
SOUTHEAST ALASKA

				CHANGES FROM:	
	P/	R/			
	5/83	4/83	5/82	4/83	5/82
Nonag. Wage & Salary	29100	29150	28300	-50	800
Construction	2200	2000	1550	200	650
Manufacturing	3300	3750	4050	-450	-750
Food & Kindred Prod.	1000	1700	1250	-700	-250
Lumber & Paper Prod.	2050	1800	2600	250	-550
All Other Mfg.	250	250	200	0	50
Trans. Comm. & Util.	2300	2200	2550	100	-250
Trade	4700	4550	4100	150	600
Wholesale Trade	200	200	300	0	-100
Retail Trade	4500	4350	3800	150	700
Finance-Ins. & R. Estate	1050	1000	1000	50	50
Mining, Svcs. & Misc.	3600	3550	3500	50	100
Government	11950	12100	11550	-150	400
Federal	2200	2200	2250	0	-50
State	5750	6000	5350	-250	400
Local	4000	3900	3950	100	50

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

HOURS AND EARNINGS

By John Boucher

The significant change in Alaska's hours and earnings data for April was a 19% over-the-year increase in average weekly earnings in the lumber and paper products sector, accompanied by an 8% increase in average weekly hours. Coupled with the report that housing starts in Japan were up 20.7% 1/ over the previous January, this gives hope that the sagging timber industry is beginning to recover. However, the closing of Wrangell's sawmill for most of June indicates that the increase may be due instead to the mild spring in Southeast Alaska.

Food and kindred products experienced a 10% decrease in weekly earnings and a 12% decrease in average weekly hours but this was largely due to a key employer not being included in the sample.

1/ Industrial Bank of Japan Monthly Report, April 1983, p.3.

ALASKA
HOURS AND EARNINGS
FOR
SELECTED INDUSTRIES 1/ 2/

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	p/ 4/83	r/ 3/83	4/82	p/ 4/83	r/ 3/83	4/82	p/ 4/83	r/ 3/83	4/82
Mining	$22.97	$21.89	$21.09	48.0	51.5	52.4	$1102.56	$1127.34	$1105.12
Contract Const.3/	23.20	23.00	23.09	42.0	41.2	46.2	974.40	947.60	1066.76
Manufacturing	13.70	13.07	12.86	32.6	35.3	34.9	446.62	461.37	448.81
Food & Kindred Prod.	8.68	8.71	8.38	26.5	30.6	30.4	230.02	266.53	254.75
Lumber & Paper Prod.	17.01	16.37	15.45	39.4	41.4	36.5	670.19	677.72	563.93
Trans. Comm. & Util.	15.23	15.48	14.65	37.2	36.5	36.4	575.86	565.02	533.26
Trade	10.20	9.59	9.64	33.8	34.2	34.3	344.76	327.98	330.65
Wholesale Trade	12.09	11.25	11.35	37.2	37.1	37.8	449.75	417.38	429.03
Retail Trade	9.37	8.88	8.85	32.5	33.1	32.8	304.53	293.93	290.23
Finance, Ins. & R.E.	--	--	--	--	--	--	339.54	342.55	335.50

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor

2/ Excludes eating and drinking establishments

3/ Due to technical revision in construction sample, 1982 estimates are not strictly comparable to previous years data.

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

9/1/83 S0320-1
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AUGUST 1983

ALASKA ECONOMIC TRENDS

Alaska Department of Labor   Bill Sheffield, Governor, State of Alaska

JUNEAU·ALASK

1 Job Opportunities in the Alaska Transportation Industry

ALASKA ECONOMIC TRENDS

Bill Sheffield, *Governor, State of Alaska*

Jim Robison, *Commissioner, Department of Labor*

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In Cooperation With:
Employment Security Division
Alaska Department of Labor

Bureau of Labor Statistics
U.S. Department of Labor

Employment and Training Administration
U.S. Department of Labor

August 1983
Volume 3
Issue 8

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Alaska Economic Trends is published monthly by the Alaska Department of Labor, Research & Analysis Section, P.O. Box 1149, Juneau, Alaska 99802.

POSTMASTER: Send address change to ALASKA ECONOMIC TRENDS, P.O. BOX 1149, Juneau, Alaska 99802.

LABOR FORCE BY REGION AND CENSUS DIVISION

	Labor Force			Unemployment			Rate			Employment		
	P	*R*		*P*	*R*		*P*	*R*		*P*	*R*	
	6/83	5/83	6/82	6/83	5/83	6/82	6/83	5/83	6/82	6/83	5/83	6/82
Alaska Statewide	224551	220246	215028	22187	23684	21234	9.9	10.8	9.9	202364	196562	193794
Anch.-Matsu Region	116414	113603	109655	9252	9652	8709	7.9	8.5	7.9	107162	103951	100946
Anchorage	104997	102461	98893	7766	8143	7302	7.4	7.9	7.4	97231	94318	91591
Matanuska-Susitna	11417	11142	10762	1486	1509	1407	13.0	13.5	13.1	9931	9633	9355
Gulf Coast Region	24099	24239	23714	2900	3703	3110	12.0	15.3	13.1	21199	20536	20604
Cordova	1226	1259	1187	91	160	84	7.4	12.7	7.1	1135	1099	1103
Kenai	12561	12541	12374	1760	2077	1876	14.0	16.6	15.2	10801	10464	10498
Kodiak	5375	5370	5354	534	681	649	9.9	12.7	12.1	4841	4689	4705
Seward	1726	1821	1638	214	357	169	12.4	19.6	10.3	1512	1464	1469
Valdez	3211	3248	3161	301	428	332	9.4	13.2	10.5	2910	2820	2829
Interior Region	29198	29029	27680	4515	4549	3839	15.5	15.7	13.9	24683	24480	23841
Fairbanks	23864	23719	22672	3746	3766	3239	15.7	15.9	14.3	20118	19953	19433
Southeast Fairbanks	2305	2258	2197	287	257	248	12.5	11.4	11.3	2018	2001	1949
Upper Yukon	760	725	681	158	128	100	20.8	17.7	14.7	602	597	581
Yukon-Koyukuk	2269	2327	2130	324	398	252	14.3	17.1	11.8	1945	1929	1878
Northern Region	10892	10706	10274	1054	992	1007	9.7	9.3	9.8	9838	9714	9267
Barrow-North Slope	2865	2801	2735	211	181	235	7.4	6.5	8.6	2654	2620	2500
Kobuk	3451	3399	3235	398	384	359	11.5	11.3	11.1	3053	3015	2876
Nome	4576	4506	4304	445	427	413	9.7	9.5	9.6	4131	4079	3891
Southeast Region	32979	31841	31915	3367	3701	3074	10.2	11.6	9.6	29612	28140	28841
Angoon	462	430	458	70	58	76	15.2	13.5	16.6	392	372	382
Haines	1159	1140	1117	160	191	144	13.8	16.8	12.9	999	949	973
Juneau	11812	11363	11329	1062	1146	860	9.0	10.1	7.6	10750	10217	10469
Ketchikan	6943	6680	6719	714	761	652	10.3	11.4	9.7	6229	5919	6067
Outer Ketchikan	872	865	857	138	168	142	15.8	19.4	16.6	734	697	715
Prince of Wales	1613	1556	1480	243	254	146	15.1	16.3	9.9	1370	1302	1334
Sitka	4724	4494	4781	381	367	551	8.1	8.2	11.5	4343	4127	4230
Skagway	1588	1566	1546	140	190	135	8.8	12.1	8.7	1448	1376	1411
Wrangell-Petersburg	3806	3747	3628	459	566	368	12.1	15.1	10.1	3347	3181	3260
Southwest Region	10969	10828	11790	1099	1087	1495	10.0	10.0	12.7	9870	9741	10295
Aleutian Islands	2847	2821	3015	163	172	215	5.7	6.1	7.1	2684	2649	2800
Bethel	3596	3526	3851	456	427	576	12.7	12.1	15.0	3140	3099	3275
Bristol Bay Borough	372	390	416	18	40	47	4.8	10.3	11.3	354	350	369
Bristol Bay	1417	1418	1522	92	110	139	6.5	7.8	9.1	1325	1308	1383
Kuskokwim	985	966	1088	129	121	195	13.1	12.5	17.9	856	845	893
Wade Hampton	1752	1707	1898	241	217	323	13.8	12.7	17.0	1511	1490	1575

P/=Preliminary   1982 Benchmark

R/=Revised

Federal guidelines require the use of unrounded labor data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

JOB OPPORTUNITIES IN THE ALASKA AIR TRANSPORTATION INDUSTRY

By Neal Fried and Greg Huff

When Roy Jones flew his Curtis MF Flying Boat into Ketchikan in 1922, the Alaska commercial airline industry was born. The aviation industry quickly found a niche in vast, remote Alaska. This article discusses the structure of the Alaska air transportation industry, related job opportunities, and education/training programs.

INDUSTRY STRUCTURE

Alaska is the "flyingest" state in the nation. There are 10,250 pilots, or one of every 45 Alaskans. This is approximately nine times higher than the national average. There are 3,769 commercial-rated pilots in the state, although not all fly as a profession.

Wage and salary employment in the air transportation industry is 5,650, representing 3% of Alaska employment as compared to 0.4% nationally.*1*/ Over the past decade Alaska employment in this industry has grown by 88%, slightly more than overall employment.

Sixty percent of Alaska air transportation employment is in Anchorage. Though employment is concentrated in Anchorage, the remaining jobs are distributed throughout the state.

Industry firms can be classified as scheduled airlines, air taxi operators, or "fixed-base" operations, which are firms which provide aviation service, but do not actually operate planes. The scheduled airlines account for 72% of industry employment.

Air transportation occupations can initially be divided into airborne and ground categories. The airborne category consists of pilots, flight engineers and flight attendants. While flight crew member occupations have a glamorous, high-profile image, a 1979 Alaska Department of Labor Survey found that they constitute only 20% of Alaska air transportation employment.

The remaining 80% is comprised primarily of maintenance personnel, reservation and passenger service agents, air traffic controllers, dispatchers, and management personnel.

JOB OPPORTUNITIES

As in any field, job opportunities in the air transportation industry are determined by supply and demand for labor. Industry labor demand is influenced by Alaska and U.S. economic conditions, technological changes, and union agreements. Supply is influenced by pay levels, working conditions, and the number of trained and/or experienced people in the field. For a variety of reasons, there is keen competition for employment in the air transportation industry. This situation is unlikely to change through the 1980's.

Alaska air transportation employment is expected to increase moderately through the 1980's in response to growth in population, personal income and tourism. Nationally, 52,000 air transportation employees have been laid off during the past three years.2/ While the current economic recovery is expected to result in increased air travel, it will take some time before a significant rebound in employment occurs. Most airlines are operating far below capacity, meaning that large increases in passenger-miles traveled can be accommodated with only small employment expansion. Additionally, several major airlines, including one operating in Alaska, are generally considered candidates to follow Braniff International into bankruptcy.

Though salaries are on par with the rest of the private sector, the industry offers desirable travel benefits, and includes several occupations frequently seen as glamorous or prestigious.

Air transportation demand is both highly seasonal and highly cyclical. This produces periodic fluctuations in employment, resulting in a large pool of experienced workers competing for openings.

Employment opportunities vary among the different types and sizes of the air transportation-related businesses. Large airlines have more specialized

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Estimated Employment by Selected Occupations and Growth and Replacement Needs*
Alaska

				Average Annual Job Openings	
	1981	1982	1986	Growth	Separations
Air traffic controller	552	555	565	3	9
Flight engineer	74	75	91	3	7
Airplane pilot	1056	1078	1297	48	9
Flight attendant	112	114	139	5	9
Aircraft mechanics	868	885	1052	37	17
Line service attendants	689	705	859	34	11
Reservation agents	193	197	239	9	6
Passenger service agents	1223	1247	1515	58	32

* Does not include turnover.

Source: Alaska Department of Labor, *Forecast for Selected Occupations, 1981* job classes, with more training and experience usually required. In smaller general aviation firms and fixed base operations a person may have many responsibilities. Training and experience requirements are often lower. The smaller firms frequently provide a training ground for employment with a large airline.

SPECIFIC OCCUPATIONS

Reservation and Passenger Service Agents

Employment opportunities for reservation and passenger service agents during the 1980's will be fairly good. However, applicants will find considerable competition for openings because of the large number of qualified persons attracted to airline jobs.

Proper training and education make it possible to become a reservation or passenger service agent. High school education is required and some college is preferred. Small commuter airlines and travel agencies are often a good way to gain experience. Reservation agents may be promoted to passenger service agents. Reservation agents work in a central office answering customer telephone inquiries and booking reservations. Like the reservation agent, the passenger service agent books reservations but works at airport terminals or ticket offices. Added duties include the preparation of tickets, helping passengers board and gathering tickets. For more detailed job descriptions see the *Occupational Outlook Handbook*, U.S. Department of Labor, Bureau of Labor Statistics, 1982-1983 edition. (The *Handbook* also contains detailed descriptions on the following occupations).

Mechanics

The employment outlook for A & P (airframe and power plant) mechanics and avionics (electronic equipment) mechanics is fair due to expected growth in the aviation industry. However, applicants will find keen competition for most openings. Mechanics employed by an airline may be more specialized and work on only a few types of aircraft; at a small, independent repair shop mechanics usually work on all kinds of aircraft.

Employment opportunities in Alaska are better with the relatively smaller general carrier and fixed-base operations than with large airlines, because most major airlines serving Alaska have mechanical work done outside. Opportunities are best in the bush areas of the state where the supply of qualified workers is very low.

Line Service Attendants

Competition for line service attendants (freight loaders, fuelers and "other" ramp personnel) jobs is particularly keen, primarily because entry level positions require no previous training or experience. More often than not the "seniority" positions are filled internally. Small airlines are a good way to gain experience for major airline positions.

Flight Attendants

Job applicants can expect heavy competition for the relatively small number of job openings. Most opportunities lie outside Alaska where most airlines that serve Alaska are based. Wien and Reeve-Aleutian Airlines are the only major Alaska carriers with most flight attendants stationed in the state. Airlines serving Alaska report hundreds of applicants annually. One airline has even started charging a $10 application processing fee because it was flooded with applicants.

Most airlines give newly hired flight attendants several weeks of training. New attendants are placed on reserve status and either fill in on extra flights or replace attendants who are sick or on vacation. It may take several years to become a full-status attendant. The cyclical and seasonal nature of the industry causes many flight attendants to be furloughed, in some cases for extended periods.

Pilots

More pilots will be needed during the 1980's, but competition for jobs will be intense, with the number of qualified pilots exceeding the number of openings. Pilots work at many different kinds of businesses and fly a variety of aircraft. To many pilots the ultimate flying job is with a major airline commanding a large jet aircraft. Very few Alaska pilots will reach this level. Most pilots flying for major airlines serving Alaska are stationed Outside. The majority of Alaska pilots fly charter or get jobs with small carriers such as air taxis, commuter airlines and air freight carriers.

There are several ways to become a professional pilot. Many obtain the training through the military, while others start as flight instructors, building up their flying hours to obtain a commercial pilot's license. As a pilot's flight hours increase and ratings advance, new opportunities open up.

Air Traffic Controllers

Job opportunities as air traffic controllers are fairly good with the proper training, education and passage of pre-entry exams. After the 1981 strike-related firing of air traffic controllers, many openings occurred instantly and the Federal Aviation Administration (FAA) could not fill the positions fast enough. Two years later the FAA has become saturated with air traffic controller trainees. Hiring has slowed, although there are still more openings than before the strike. The backlog of applications is so large that applicants may wait more than a year before knowing if they have been accepted into the training program at the FAA Academy. College graduates and individuals with civilian or military experience will have the best opportunities.

EDUCATION AND TRAINING PROGRAMS

The education and training necessary to open the door to employment varies from a high school diploma to a four-year college degree, and on-the-job training to 2,500 hours of flying time. In Alaska, there are a variety of educational programs that are tailor-made for this industry. With stiff competition for jobs, any education or training beyond the minimum requirements will help an applicant stand out from the crowd of competitors.

One of the major training grounds for the industry is the military. This is particularly true for pilots and mechanics. Because pilot training—particularly jet training—is prohibitively expensive, military training is almost the only route to acquire the skills and hours needed to qualify as a jet pilot.

There are 13 FAA approved flight training schools in Anchorage, Juneau, Sitka and Fairbanks. Countless other non-certified schools and teachers can provide pilot training, also. The Anchorage Community College (ACC) and the Tanana Valley Community College (TVCC) have two year professional piloting programs. Other community colleges throughout the state offer piloting programs. Civilian jet training would have to be acquired at schools outside Alaska. To become a commercial pilot, applicants must be 18 years old and have a minimum of 250 hours of flight experience. Further training and flying time with different aircraft are necessary before most persons will find employment as pilots. For example, an airline pilot has to be at least 23 years old and have a minimum of 1,500 hours of flying experience. Many airlines also require a four-year college degree, in addition to flight time.

The requirements needed to become a commercial helicopter pilot are slightly different. The best training available is through the military, as helicopter training is extremely expensive, costing approximately $150-$180 an hour. The cheapest civilian route is to first acquire an airplane license and then train for 50 hours on a helicopter.

Numerous educational institutions in Alaska provide programs and courses to meet the educational needs relevant to the aviation industry. The Anchorage Community College has the most extensive aviation program. ACC offers four areas of study—aviation administration, aviation maintenance technology, air traffic control and professional piloting. Aviation administration is a general, two year program for persons interested in working for the FAA or in administration of a private aviation firm. The air traffic control program, also two years, helps a person to fill the requirements and pass the entrance exam to become an air traffic controller. For this, the individual must have a high school degree, at least three years of responsible work experience (including some supervisory duties), or four years of college or a combination of both college and work experience. If a person is accepted as a candidate, they then receive 15-17 weeks of training at the FAA Academy in Oklahoma City. After successful completion of this training, on-the-job training continues at an FAA facility.

The third program, aviation maintenance technology, provides the necessary training to acquire an A & P certificate and an Associate of Applied Science degree. The Tanana Valley Community College in Fairbanks, through the Hutchison Career Center, also has an A & P program. TVCC's one year program prepares the individual to take the appropriate written, practical and oral examinations for certifications.

The Anchorage School District's Career Center and Alaska Pacific University provide classes that train students in travel agent ticketing and computer operation. This will help a person find employment as a passenger service agent, reservation agent or flight attendant. Most airlines provide additional in-house training.

Prior experience as a travel agent or work with the public makes the job search easier in these occupations.

Management staff often moves up the ranks internally or are recruited from other airlines and industries. The University of Alaska Fairbanks offers associate and bachelor degrees in travel industry management. Business and accounting training at any of Alaska's higher education schools will help the job seeker.

The skills needed to become an avionics technician for the repair of electronic equipment in the aviation industry can be acquired in a number of ways. Some of the A & P programs provide a good deal of avionics training. A person can also hire on as a helper in a repair shop and learn the trade through experience, generally over a two-year period. There are special avionics programs in the lower 48. The needed skills are in constant flux due to technological advances.

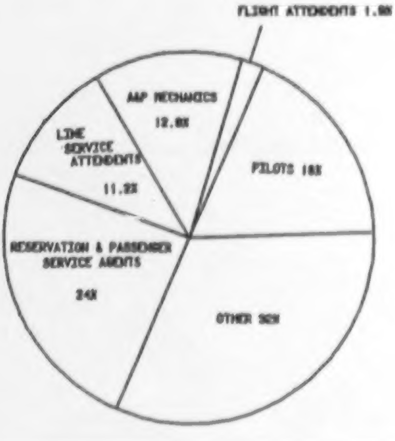
To become an airline dispatcher a person has to either choose from two schools in the lower 48 which provide the appropriate training or work as a dispatcher-clerk under the tutelage of a certified dispatcher for two years. Practical and written exams must be taken to be certified. The on-the-job training route is more popular in Alaska.

Load masters, cargo handlers, fuelers and fleet service personnel need only on-the-job training. Ability to drive a truck, operate a forklift, or closely related skills will help the job seeker.

One of the themes throughout this article has been the over-supply of job applicants in the aviation industry. One air taxi operator compared the pursuit of a commercial jet pilot position to the chances of becoming a Hollywood star. Though not all jobs in the aviation industry fall in this category, the right education, training and experience are necessary to stand out in this crowded job market.

1/ This does not include the 1300 FAA personnel in Alaska. If they are included, the employment share would rise to 3.6%.

2/ *U.S. News & World Report*, Dec. 20, 1982, p. 74.



ALASKA

By Brit Harvey

OUTLOOK FOR JAPANESE DEMAND

Japanese demand is a crucial factor influencing employment in Alaska's forest products and seafood processing industries. Japanese demand is affected by numerous factors, ranging from international macroeconomic policy to fish catch volumes. Discussed below is the overall outlook for the Japanese economy through March 1984, and specific factors influencing demand for Alaska products.

General Economic Outlook for Fiscal 1983

Japanese fiscal years run from April through March. FY83 ends in March 1984.

The apparently robust economic recovery now occurring in the U.S. would normally trigger strong growth in Japan's export-oriented economy. Such trade-based growth will be dampened by U.S. trade restrictions on autos, motorcycles and steel, which have accounted for 43% of Japan's exports to the U.S. Lingering recession in Europe, budget cut-backs in oil-exporting countries, and credit problems in other less developed nations will combine to severely limit growth in demand for Japan's exports.

The Japanese FY83 budget is the most austere one since 1955. Japanese federal spending, which is about the same proportion of GNP as in the U.S., will not drive economic growth.

Due to lack of foreign demand for Japanese goods and limited government spending, only slight GNP growth is expected during FY83.

Yen/Dollar Exchange Rate

Since January 1980, the trade-weighted value of the dollar has risen by 40% against its major trading partners. This has helped moderate U.S. inflation while hurting U.S. exports. The yen, currently at about 240Y/1$US, is generally considered the most dollar-undervalued of the major currencies. Excepting a weakening last fall, the yen has remained near its current value for a year, and appears unlikely to strengthen. The outlook is for continued high yen prices for Alaska exports.

Forest Products

Despite a recent rise in housing starts, overall Japanese investment in private housing is not expected to increase over the low FY82 level.

Government budget cuts are reducing public housing investment and FY 83 housing starts are expected to remain at about the same 1.15 million level as last year.

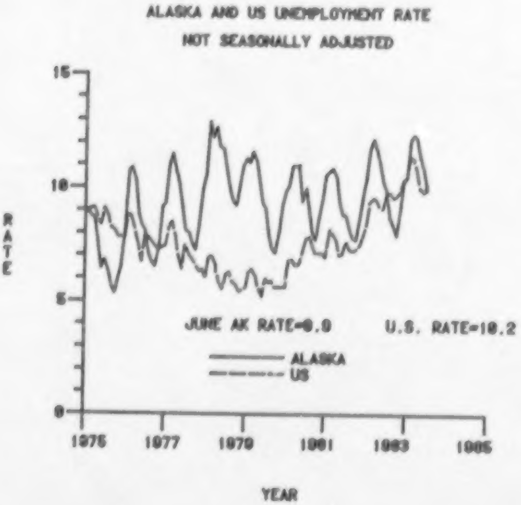
Japanese housing starts are the single most important influence on production levels of logs and cants in Alaska. It is therefore likely that the depressed conditions in Alaska's forest products industry will continue. Major firms such as Alaska Lumber and Pulp and Sealaska will continue to confront market conditions which resulted in losses on forest products operations last year. Employment is likely to remain depressed for a third straight year.

Seafood Processing

Japanese FY83 demand for Alaska's main seafood products, salmon and crab, is not likely to show much growth over 1982.

Demand for Alaska's primarily luxury seafood products is influenced by the general level of wealth in Japan. The development of the luxury seafood market in Japan in the 1970's coincided with rapidly increasing Japanese personal income. FY83 personal income is expected to show only very modest gains due to the generally stagnant economy. Increases in yen spent on Alaska seafood will therefore be small.

High prices last year, especially for crab, depressed demand. Large inventories of salmon and crab were carried into 1983. Record salmon



NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA

	P/	R/		CHANGES FROM:	
	6/83	5/83	6/82	5/83	6/82
Nonag. Wage & Salary	214800	209300	201300	5500	13500
Mining	9900	9900	9600	0	300
Construction	19600	17300	15900	2300	3700
Manufacturing	12000	11100	14100	900	-2100
Food & Kindred Prod.	6200	5300	7700	900	-1500
Lumber & Paper Prod.	2700	2800	3500	-100	-800
All Other Mfg.	3100	3000	2900	100	200
Trans. Comm & Util.	21200	19600	19500	1600	1700
Trucking & Whseing.	3000	2700	2700	300	300
Water Transportation	2000	1800	1400	200	600
Air Transportation	6100	5800	6000	300	100
Other Trans. Comm. & Utilities	10100	9300	9400	800	700
Trade	41100	40000	36300	1100	4800
Wholesale Trade	8300	8000	7300	300	1000
Retail Trade	32800	32000	29000	800	3800
Gen. Merchandise & Apparel	4800	4700	4300	100	500
Food Stores	5600	5500	4700	100	900
Eating & Drinking Places	11200	11000	10500	200	700
Other Retail Trade	11200	10800	9500	400	1700
Finance-Ins. & R. Estate	10500	10100	9800	400	700
Services & Misc.	39000	37400	36300	1600	2700
Government	61500	63900	59800	-2400	1700
Federal	18800	18400	18000	400	800
State	18900	18400	17400	500	1500
Local	23800	27100	24400	-3300	-600

Prepared in cooperation with the U.S. Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P Denotes preliminary estimates.

R Denotes revised estimates.

harvests in Bristol Bay this year will probably add to this inventory problem, allowing Japanese distributors to wait until the last moment before contracting for fish.

UNEMPLOYMENT STATISTICS

The unemployment statistics published in the center insert of *Alaska Economic Trends* are produced under a federal program named "Local Area Unemployment Statistics" (LAUS). While the data and their format appear straightforward, LAUS, as with many economic statistics, is easily misinterpreted.

Many Alaskans take issue with the federal definition of "unemployed" used by LAUS. Simply put, to be officially unemployed a person must not have worked at all, and must have actively looked for work. In the bush, many people who would like to work neither work nor look for work because job opportunities are nonexistent. If "unemployed" is defined as not working and claiming to want to work, unemployment rates might double in the bush during much of the year.*1/*

Federal regulations require the publishing of unrounded LAUS data. This implies that statisticians actually know the exact number of unemployed persons in each census division. In reality, the estimates carry a very large, though not statistically calculable, error range at the sub-state level. Both random error and systematic bias of several types exist. The federal justification for requiring the publishing of unrounded data is that in areas with a very small labor force, rounding even to the nearest 50 would result in drastic changes in unemployment rates. An additional justification is that allocation of federal funds is based on LAUS data, and that unrounded data is preferrable for this purpose. Users of LAUS data should recognize that it is the allocation function for which LAUS is designed. Economic analysis based on LAUS data should be carefully done.

In general, all LAUS data should be rounded by the user to the nearest 50 at the census division and regional level, and to the nearest 100 at the state level. The larger the size of the labor force, the more reliable the data. Annual averages are subject to less error than monthly estimates. Any user with questions about how to use LAUS data is encouraged to contact Research and Analysis.

One technical anomaly with interesting implications has recently arisen in LAUS data. LAUS involves input from both a survey and administrative unemployment insurance data. At the national level, these two sources tracked together fairly well until recently. There is now much greater unemployment as measured by the survey than as measured by unemployment insurance data.

While nobody really knows the cause of this divergence, it is apparent that a large number of people have "disappeared" from the unemployment insurance system. Possible causes are increased employment in the underground economy, increased work by undocumented immigrants (who may be inhibited in filing for unemployment), significant numbers of people laid off from work who exhausted their unemployment benefits and have been unable to earn enough money to requalify, and/or a widespread tightening of state requirements to draw unemployment insurance. Nationally, this may or may not be introducing systematic bias into a large portion of the LAUS data. Nobody knows at this time.

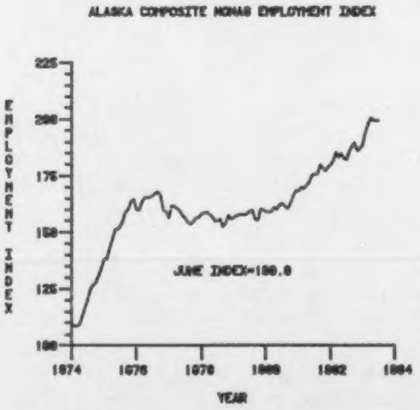
Nonagricultural Employment

June Alaska nonagricultural wage and salary employment was 214,800, or 2.6% above May, and 6.7% above last year.

Unemployment

June unemployment was 9.9%, exactly the same as last June. All indications are that the influx of job-seekers to Alaska is continuing, and that employment growth is keeping pace. The comparable national unemployment rate was 10.2% in June. Nationally unemployment is declining somewhat faster than was expected. Mid-June initial unemployment claims fell to the lowest point since the recession began. Should these trends continue, Alaska may see fewer in-migrant job seekers in coming months, and a resulting amelioration of the unemployment rate.

1/ "Lower Yukon-Kuskokwim Region Labor Market Analysis", Alaska Department of Labor, Research and Analysis; July, 1981.



ANCHORAGE-MATSU

By Greg Huff

Labor Force

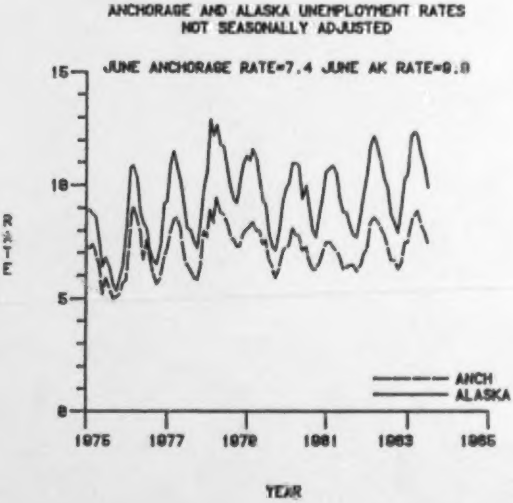
The Anchorage-MatSu labor force expanded briskly in June, due primarily to the entry of students and other "summer workers" into the job market. The unemployment rate declined to 7.9%, the same rate as last June. This indicates that the in-migration of job seekers is keeping pace with rapid employment expansion.

The developing national economic recovery may eventually lower unemployment enough to diminish migration to the Anchorage area. However, Anchorage employment expansion is also expected to moderate. The result may be a decline in the growth of Anchorage-MatSu population and labor force, with relatively little change in the unemployment rate.

Anchorage Employment

Anchorage nonagricultural wage and salary employment was 104,100 in June. After seasonal adjustment there was little change in employment in June. Compared to last year, there have been broad-based employment increases.

Construction employment during the first half of 1983 was about 8% above



NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE

	P/	R/		CHANGES FROM:	
	6/83	5/83	6/82	5/83	6/82
Nonag. Wage & Salary	104100	101550	97050	2550	7050
Mining	4150	4050	4000	100	150
Construction	9050	8150	8800	900	250
Manufacturing	2650	2500	2600	150	50
Food & Kindred Prod.	500	450	550	50	-50
Other Mfg.	2150	2050	2050	100	100
Trans. Comm. & Util.	10000	9550	9250	450	750
Trucking & Whseing.	1500	1400	1350	100	150
Water Transportation	400	450	300	-50	100
Air Transportation	3750	3600	3700	150	50
Other Trans. Comm. & Utilities	4350	4100	3900	250	450
Trade	24750	24300	21600	450	3150
Wholesale Trade	5750	5600	5300	150	450
Retail Trade	19000	18700	16300	300	2700
Gen. Merchandise	1850	1850	1700	0	150
Food Stores	2600	2550	2150	50	450
Eating & Drinking Places	6850	6800	6100	50	750
Other Retail Trade	7700	7500	6350	200	1350
Finance Ins. & R. Estate	6700	6500	6200	200	500
Services & Misc.	21700	21200	20250	500	1450
Government	25100	25300	24350	-200	750
Federal	9850	9800	10000	50	-150
State	6250	6150	6000	100	250
Local	9000	9350	8350	-350	650

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

the corresponding period in 1982. While this is still a rapid rate of growth, it is slower than 1981-1982. A spring decrease in heavy construction contributed to this moderation in the growth rate of construction. Heavy construction is expected to pick up later in the year.

Trade employment continued its rapid growth. With 14% expansion, trade has accounted for almost 45% of all Anchorage employment growth during the past year.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE-MATSU

				CHANGES FROM:	
	P/ **6/83**	*R/* **5/83**	**6/82**	**5/83**	**6/82**
Nonag. Wage & Salary	109850	106450	101550	3400	8300
Mining	4450	4250	4200	200	250
Construction	9500	8550	9100	950	400
Manufacturing	2750	2550	2650	200	100
Trans. Comm. & Util.	10600	10000	9600	600	1000
Trade	25700	25200	22450	500	3250
Finance-Ins. & R. Estate	6900	6700	6350	200	550
Services & Misc.	23500	22550	21250	950	2250
Government	26450	26650	25950	-200	500

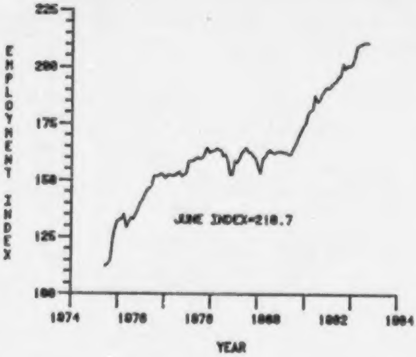
Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

ANCHORAGE COMPOSITE NONAG EMPLOYMENT INDEX



FAIRBANKS/INTERIOR

By Neal Fried

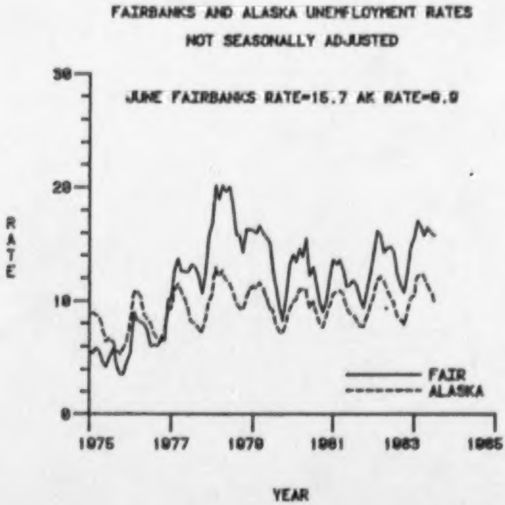
Forest Fires Boost Employment

Employment in Fairbanks and the Interior grew dramatically in June, with Fairbanks employment up by 1,050. Over-the-year growth was 6%. Though employment typically expands during June, this was the largest June increase in five years.

Much of the employment increase was the result of a busier than normal forest fire season. More than 400 emergency fire fighters were on the job at one time at each of two major fires near Minto and Rosie Creek. Fire fighting crews came from communities throughout the Interior. With a 16-person crew earning an average $2,400/day, fire fighting employment is a major source of income for many rural crew members.

Construction Employment

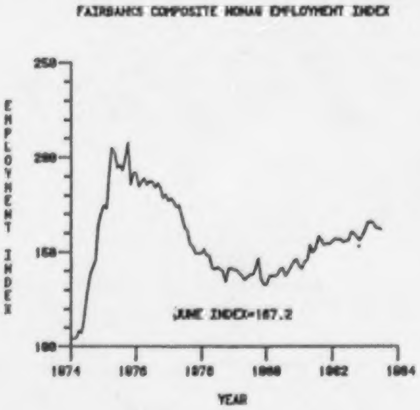
Though state revenues have declined, Fairbanks' and Interior's state capital budget appropriations reached record levels this year. More than 95% of the money is earmarked for construction. Even assuming some vetos by the Governor, 1983 state capital spending in Fairbanks and Interior will spur construction employment.



Fairbanks' capital budget totals approximately $120 million and Interior's is $98.5 million. This represents a doubling of last year's Fairbanks' appropriations ($56 million) and a tripling of Interior's ($27.9 million). The only year that came close to having budgets in these figures was 1981, with $93 million for Fairbanks and $40.2 million for the Interior.

The projects funded this year vary from $11 million for UAF dormitory construction to a $1.8 million Fort Greely gym and from a $5,000 Fort Yukon Radio Translator to $25,000 for a Goldstream Volunteer Fire Department building completion.

Obviously, the industry which will benefit most from this record budget will be construction. Some of these funds will quickly become brick and mortar, while the rest will take longer, influencing the industry for years. State-funded projects are likely to strengthen construction employment in Fairbanks and Interior for at least the next two years.



NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
FAIRBANKS

	P/	R/		CHANGES FROM:	
	6/83	5/83	6/82	5/83	6/82
Nonag. Wage & Salary	25500	24450	23950	1050	1550
Mining	150	150	200	0	-50
Construction	2100	1800	2000	300	100
Manufacturing	450	450	400	0	50
Trans. Comm. & Util.	3100	2850	2950	250	150
Trucking & Whseing.	650	550	600	100	50
Air Transportation	700	650	650	50	50
Other Trans. Comm. & Utilities	1750	1650	1700	100	50
Trade	4950	4800	4700	150	250
Wholesale Trade	850	850	850	0	0
Retail Trade	4100	3950	3850	150	250
Gen. Merchandise & Apparel	450	450	450	0	0
Food Stores	750	700	700	50	50
Other Retail Trade	2900	2800	2700	100	200
Finance-Ins. & R. Estate	900	900	850	0	50
Services & Misc.	5050	4850	4850	200	200
Government	8800	8650	8000	150	800
Federal	2400	2250	2500	150	-100
State	4200	3700	3350	500	850
Local	2200	2700	2150	-500	50

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
INTERIOR

				CHANGES FROM:	
	P/ 6/83	*R/* 5/83	6/82	5/83	6/82
Nonag. Wage & Salary	28800	28450	27350	350	1450
Mining	400	350	400	50	0
Construction	2200	2200	2050	0	150
Manufacturing	550	500	450	50	100
Trans. Comm. & Util.	3900	3700	3800	200	100
Trade	5400	5250	4950	150	450
Finance-Ins. & R. Estate	1000	950	950	50	50
Services & Misc.	5350	5100	5200	250	150
Government	10000	10400	9550	-400	450

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

GULF COAST

By Neal Fried

Unemployment

The Gulf Coast region's unemployment rate in June dropped a full 3.3 percentage points. Much of the decline can be attributed to the beginning of the salmon season. Fishermen are returning to work and fish processors have geared up for the salmon frenzy. Much of Bristol Bay's record catch, though not geographically located in the region, has found its way to processors in Kenai, Kodiak, and Cordova, providing a further boost to employment in these areas.

Fishing was not the only industry responsible for these employment gains. Tourism, particularly on the Kenai Peninsula, is having a good year. Anchorage's growing population and exceptionally good weather have provided the right ingredients for a good tourism season.

Construction is also in high gear. Public funded construction dominates the industry but commercial and residential construction are also having a good year.

Construction Gets Its Annual Boost

The state capital budget appropriations insure that public construction activity will remain strong during the coming two years. Though a decline in revenues is reflected to an extent in the region's budget this year, allocations remain far above pre-1981 levels.

The region's capital budget totals approximately $100 million, which compares to $136 million in 1982 and $173 million in 1981. This year's capital budget may be pared somewhat by the Governor.

Since the first mammoth capital budget was passed in 1980, this annual legislative activity has had a growing influence on the regional and state economies. The construction industry is the major beneficiary of this activity as approximately 95% of appropriations are for construction related projects.

The appropriations this year fund a menagerie of projects, ranging from $10,000 for Tyonek's sawmill repairs to $6.0 million for Seward's Marine Industrial Park. In some cases these appropriations will boost construction activity immediately and in other cases they will be undertaken over a number of year's.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
GULF COAST

				CHANGES FROM:	
	P/	R/			
	6/83	5/83	6/82	5/83	6/82
Nonag. Wage & Salary	18400	17800	17700	600	700
Mining	900	900	900	0	0
Construction	1650	1350	1550	300	100
Manufacturing	3350	3100	3400	250	-50
Food & Kindred Prod.	2550	2350	2550	200	0
All Other Mfg.	800	750	850	50	-50
Trans. & Comm. Util.	1950	1950	1850	0	100
Trade	2800	2650	2650	150	150
Wholesale Trade	450	450	450	0	0
Retail Trade	2350	2200	2200	150	150
Finance Ins. & R. Estate	500	500	450	0	50
Services & Misc.	2750	2600	2600	150	150
Government	4500	4750	4300	-250	200
Federal	500	500	500	0	0
State	1450	1400	1300	50	150
Local	2550	2850	2500	-300	50

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

SOUTHEAST

By John Boucher

Southeast Alaska nonagricultural wage and salary employment grew 5% during June. Every industry expanded except forest products and government.

Services employment increased by 12.5%. The contributing industry was hotels, motels, and lodging places which accounted for nearly all growth in this sector. Expansion in this sector resulted from the arrival of the tourist season. Tourism also contributed heavily to the growth in transportation, communiciation and public utilities. While most of the additional transportation jobs are seasonal in nature, some of the hotel and motel employment should remain permanently because of recent openings of hotels in Ketchikan and Juneau.

Other strong contributors to June growth were construction and manufacturing. Manufacturing rebounded largely because seafood processing plants geared up for the summer trolling season after experiencing a lull during May. Construction employment is still climbing steadily and will continue to do so if the State's intent to finance "bid-ready" construction projects this construction season is realized. The state is planning to spend at least $22.3 million on Southeast construction.

The exceptions to the upturn were forest products and local government. Forest products continued to suffer from poor market conditions. A strike at Louisiana-Pacific (L-P) does not bode well for July's outlook. L-P's entire west coast operation has been idled by the strike which has been attributed by union spokespersons to L-P's failing to join in an industry-wide bargaining agreement. Approximately 450 Ketchikan workers have been idled by the strike, the bulk of those from the pulp mill.

The contraction in government was due to the ending of the 1982-83 school year. Mt. Edgecumbe High School closed its doors for good this year, taking with it 120 jobs.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
SOUTHEAST ALASKA

	P/	*R/*		CHANGES FROM:	
	6/83	**5/83**	**6/82**	**5/83**	**6/82**
Nonag. Wage & Salary	30750	29200	29600	1550	1150
Construction	2650	2350	1950	300	700
Manufacturing	3650	3400	4450	250	-800
Food & Kindred Prod.	1400	1050	1600	350	-200
Lumber & Paper Prod.	2000	2100	2650	-100	-650
All Other Mfg.	250	250	200	0	50
Trans. Comm. & Util.	2600	2300	2750	300	-150
Trade	4950	4700	4300	250	650
Wholesale Trade	300	250	300	50	0
Retail Trade	4650	4450	4000	200	650
Finance-Ins. & R. Estate	1050	1000	1050	50	0
Mining, Svcs. & Misc.	4050	3600	3850	450	200
Government	11800	11850	11250	-50	550
Federal	2250	2200	2250	50	0
State	5800	5750	5400	50	400
Local	3750	3900	3600	-150	150

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

HOURS AND EARNINGS

By John Boucher

Hours and earnings remained steady in May in the nonbasic industries: transportation, communication and public utilities; finance, insurance and real estate; and trade. Seasonality does not effect the nonbasic industries as dramatically as basic industries.

Contract construction continued its spring climb, although the pace of growth in both average weekly hours and earnings slowed to 5%. Lumber and paper products also registered strong growth in average weekly hours and earnings, but since hours and earnings data is lagged two months the effects of the shutdown of a Wrangell sawmill and a strike against Louisiana-Pacific are not reflected in the data.

Elsewhere, food and kindred products grew by 20% in average weekly hours and 11% in average weekly earnings. This is attributable to the opening of seafood processing plants to handle the May hand troll opening for salmon.

ALASKA
HOURS AND EARNINGS
FOR
SELECTED INDUSTRIES 1/ 2/

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	p/	r/		p/	r/		p/	r/	
	5/83	4/83	5/82	5/83	4/83	5/82	5/83	4/83	5/82
Mining	$23.86	$22.97	$21.13	48.5	47.9	53.1	$1157.21	$1100.26	$1122.00
Contract Const. 3/	23.32	23.12	22.39	44.1	42.0	43.1	1028.41	971.04	965.00
Manufacturing	12.65	13.62	12.61	37.0	33.2	39.1	468.05	452.18	493.05
Food & Kindred Prod.	7.85	8.50	8.86	32.4	26.9	35.8	254.34	228.65	317.19
Lumber & Paper Prod.	16.07	16.62	14.96	43.8	40.0	42.1	703.87	664.80	629.82
Trans. Comm & Util.	15.79	15.26	15.00	37.2	37.2	36.2	587.39	567.67	543.00
Trade	9.86	9.70	9.64	34.8	34.9	34.8	343.13	338.53	335.47
Wholesale Trade	11.25	11.08	11.28	38.0	37.4	38.7	427.50	414.39	436.54
Retail Trade	9.26	9.11	8.89	33.5	33.9	33.3	310.21	308.83	296.04
Finance-Ins. & R. Estate	—	—	—	—	—	—	359.94	343.89	348.27

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

2/ Excludes eating and drinking establishments.

3/ Due to technical revision in construction sample, 1982 estimates are not strictly comparable to previous years data.

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

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SEPTEMBER 1983 10/7/83

ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska

1 Alaska Fish Harvesting Employment

ALASKA ECONOMIC TRENDS

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Bureau of Labor Statistics
U.S. Department of Labor

Employment and Training Administration
U.S. Department of Labor

September 1983
Volume 3
Issue 9

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Alaska Economic Trends is published monthly by the Alaska Department of Labor, Research & Analysis Section, P.O. Box 1149, Juneau, Alaska 99802.

POSTMASTER: Send address change to ALASKA ECONOMIC TRENDS, P.O. BOX 1149, Juneau, Alaska 99802.

Cover: Alaska Department of Fish and Game Photo.

The following notes pertain to Nonagricultural Wage and Salary Employment Tables:

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

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R/ Denotes revised estimates.

ALASKA FISH HARVESTING EMPLOYMENT

By Kathryn Lizik

Nonagricultural wage and salary employment statistics do not include self-employed persons. About 90% of Alaska fish harvesting employment is categorized as self-employment, and has not been included in nonagricultural employment statistics published in *Trends.* Fish harvesting employment for the period 1977 to 1981 has now been estimated by Research and Analysis staff. These data will be available in October in a publication titled *Alaska Fish Harvesting Employment 1977 -1981*. It is anticipated that fish harvesting employment estimates will be compiled on an ongoing basis. This article briefly discusses the method used to estimate fish harvesting employment, and summarizes the results.

Methodology

Estimates are compiled for each month from January 1977 through December 1981. The data are disaggregated by area (statewide and four regions) and specie/gear type.

Estimated employment is based on Alaska Department of Fish and Game fish tickets, and "crew factors" derived from a vessel survey. Fish tickets provide a count of vessel landings and catch value by area, specie and gear type. An estimate of the number of vessels fishing each month in each category is derived from fish ticket data. Crew factors are used to convert vessels fishing into employment. Due to the volitility of the fish harvesting industry and minor methodological differences, the estimates of fish harvesting employment are probably slightly high relative to the nonagricultural employment estimates normally published in *Trends.*

Summary of Results

Annual average fish harvesting employment grew from 6,000 in 1977 to 7,800 in 1981, a 30% increase. Of the 1981 total, 66% was attributable to salmon harvesting, 20% to shellfish, 7% to halibut, and the remaining 7% to bottomfish, herring and other.

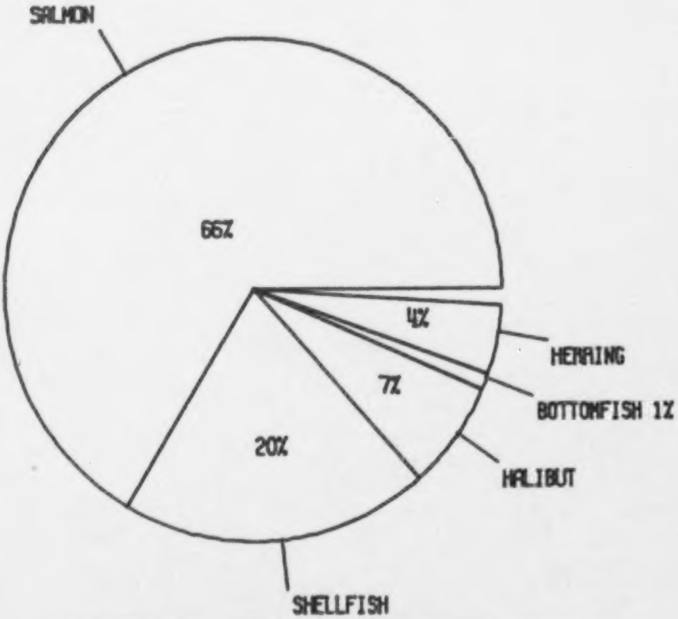
Employment was highest during the second and third quarters, peaking in July with the height of the salmon runs. July 1979 was the peak employment month during the 1977-81 period, with 25,950 jobs. The number of winter fishing jobs, while far below summer, increased during the period.

The specie/gear type with the highest employment was salmon drift gillnet, accounting for 32% of 1981 salmon harvesting employment. Set gillnet accounted for another 30%.

Total Monthly Statewide Employment
1977-1981

	1977	1978	1979	1980	1981
January	1242	1448	1177	1579	1480
February	1036	1362	1227	1888	1598
March	1033	1491	2123	2323	2802
April	1976	2505	2659	3291	3288
May	5127	5735	7604	10699	5629
June	14663	17188	21744	15003	20578
July	20102	23297	25945	23861	22401
August	15096	19036	17746	18042	20516
September	6785	8288	6695	8420	8114
October	1950	2234	3192	2983	3099
November	1447	1414	1591	2074	2156
December	1630	1329	1292	1273	1939
Total Annual Average	6007	7111	7750	7620	7800

1981 Average Employment by Specie



ECONOMIC IMPACTS OF STATE SPENDING—"Cash-on-the Street"

By Brit Harvey

It is generally agreed that Alaska's current economic expansion is primarily the result of State spending of oil revenue. Past attempts to quantify this relationship were stymied by the lack of a reliable measure of actual State spending. While data on State appropriations, federal grants to the State, and money raised through State bond sales have always been available, they have not been sufficient to measure the economic impacts of State spending. The primary cause of this insufficiency is long and varying lags between different categories of appropriations and actual expenditure, due to administrative delays.

In November 1982, consultants Gregg Erickson and Tom Singer, under contract to the State, produced a measure of actual State spending, which they referred to as "Cash-on-the-Street". This data series is presented in Table 1 in a version revised and updated by Research and Analysis. It is probably the most important information available for analyzing and forecasting Alaska employment.

Methodology

As the name implies, the Cash-on-the-Street series is an attempt to measure the number of State dollars which enter the economy each month. Briefly, State warrants (checks) redeemed are totaled by month. Warrants which do not enter the economy, such as Permanent Fund special deposits, are subtracted. Adjusted outlays by quasi-independent State agencies, such as Alaska Housing Finance Corporation, are added in. Finally, the series is adjusted for inflation using the Anchorage Consumer Price Index.*1* Readers interested in a more detailed description of this methodology may contact Research and Analysis.

Cash-on-Street Characteristics

Cash-on-the-Street (COS) has increased fairly consistently since 1978 in both nominal and real terms. Despite the recent decline in State revenues, COS (through April) has yet to be effected.

The third quarter of 1982 is extremely high in relation to other quarters. The cause of this outlying quarter is unclear. While Permanent Fund dividends and Department of Transportation and Public Facilities expenditures account for some of the discrepancy, they do not fully explain it. This very high COS quarter is unlikely to be equaled in the future, representing the peak of the current surge in State spending.

1/ CPI-U, all items less shelter, annual averages

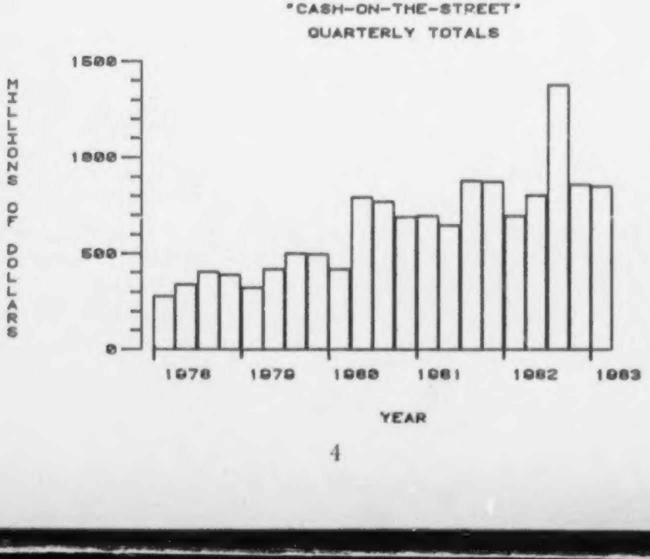
Employment/Cash-on-the-Street Relationship

Alaska nonagricultural wage and salary employment is closely correlated with Cash-on-the-Street (COS). In a statistical sense, 95% of the variation in employment from 1978 through the first half of 1983 is explained by variation in COS (see following notes for regression statistics). COS affects employment most strongly at two, three, and four quarter lags.

Qualitatively, it is clear that COS, in the form of Alaska Housing Finance Corporation and other susidized loans, Permanent Fund dividend payments, an increasing State payroll, and massive construction funding are driving Alaska's current employment boom. Neither other measures of State influence, such as revenues or appropriations, nor non-governmental influences, such as oil corporation investment, appear to correlate as closely with employment.

While COS is obviously a useful leading indicator (in a non-technical sense) of employment and overall economic activity, it has limitations. Employment may react differently to declining COS than to rising COS. The pipeline era showed that employment in Alaska does not necessarily decline sharply with the removal of a major economic stimulus. This "ratchet" effect observed following the pipeline may also occur when lower State revenues eventually result in diminishing COS.

COS is also limited in its aggregate nature. The spending of capital budget COS may effect the economy differently than operating budget money, and both may have different effects than Permanent Fund dividend expenditures. Due to the State's system of accounting, disaggregating COS is not cheaply or easily done.



"Cash-on-the-Street" (COS)
In Millions of Dollars

Year	Quarter	COS	Annual SFY Sum	COS (1978 $'s)[1]
1978	1	275.98		275.98
1978	2	339.58		339.68
1978	3	402.80		402.80
1978	4	387.93		387.93
1979	1	322.13		297.00
1979	2	416.19	1529.05	383.73
1979	3	498.17		459.31
1979	4	494.85		456.25
1980	1	418.32		350.13
1980	2	791.86	2203.20	662.48
1980	3	770.72		645.09
1980	4	687.16		575.15
1981	1	693.35		535.57
1981	2	646.90	3258.31	498.11
1981	3	877.21		675.45
1981	4	872.75		672.02
1982	1	692.94	3245.97	509.31
1982	2	803.07		590.26
1982	3	1376.41		1011.66
1982	4	858.41		630.93
1983	1	848.17		609.06
			4081.49 [2]	

1/ Adjusted by Anchorage CPI-U, all items less shelter.
2/ Extropolated from first 10 months of FY83.

Notes:

Correlation Between Nonagricultural Employment and Cash-on-the-Street.

NONAG = -11.030 + 52.6 COSADJLAG 2 + 66.1 COSADJLAG 3 + 53.2 COSADJLAG 4 + 23604 SD1 + 22773 SD2 + 742 SD3

All series are first differences of quarterly data.

NONAG = Alaska nonagricultural employment (1982 benchmark)

COSADJ = Cash-on-the-Street, adjusted for inflation, monthly average, in millions of dolars.

SD = Seasonal dummies

R2 = 96.9%

R2 adjusted for degrees of freedom = 95.0%

Durbin-Watson Statistic = 1.60

ALASKA

By John Boucher

Nonagricultural Employment

July nonagricultural wage and salary employment for Alaska was 227,100 or 4.6% above the June level and 9.6% above July 1982.

July employment in the food and kindred products sector, particularly seafood processing, soared to near record levels due to several outstanding salmon runs. The Bristol Bay record for sockeye salmon was exceeded. Preliminary counts from the Alaska Department of Fish and Game put the catch at 36.7 million fish, peaking during the first week in July at 3 million fish harvested per day. The 1983 catch was nearly 10 million more sockeye than the previous record year of 1981, and more than double the 15.1 million recorded in 1982. Upper and Lower Cook Inlet also had record sockeye catches which peaked about one week later than Bristol Bay, adding to employment in Southcentral Alaska. Later in July, a strong pink salmon run in Southeast added to seafood processing employment in that region. In all, it is estimated an additional 8,800 jobs were available in seafood processing during July, an increase of 67% over June.

Construction posted a 3% gain in employment during July, the smallest gain since February. This indicates that the record post-pipeline construction season of 1983 is beginning to peak. Government's contraction of 22% was due to the seasonal layoffs in educational employment.

Unemployment

July unemployment was 8.5%, two-tenths of a point lower than last July. This marks the first time since September 1982 that unemployment has improved when compared to the previous year's rate.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA

	P/ 7/83	R/ 6/83	7/82	CHANGES FROM: 6/83	7/82
Nonag. Wage & Salary	227100	217000	207200	10100	19900
Mining	10500	10300	9900	200	600
Construction	20700	20100	17400	600	3300
Manufacturing	21900	13100	17900	8800	4000
Food & Kindred Prod.	16000	7200	12100	8800	3900
Lumber & Paper Prod.	2600	2800	2900	-200	-300
All Other Mfg.	3300	3100	2900	200	400
Trans. Comm. & Util.	21000	20200	19800	800	1200
Trucking & Whseing.	3200	3000	2700	200	500
Water Transportation	1800	1900	1500	-100	300
Air Transportation	6200	6200	6300	0	-100
Other Trans. Comm. & Utilities	9800	9100	9300	700	500
Trade	41400	41100	37000	300	4400
Wholesale Trade	8200	8200	7400	0	800
Retail Trade	33200	32900	29600	300	3600
Gen. Merchandise & Apparel	4900	4800	4500	100	400
Food Stores	5900	5900	4700	0	1200
Eating & Drinking Places	11200	11200	10700	0	500
Other Retail Trade	11200	11000	9700	200	1500
Finance-Ins. & R. Estate	10600	10400	9900	200	700
Services & Misc.	39500	38900	36500	600	3000
Government	61500	62900	58800	-1400	2700
Federal	19200	19100	18300	100	900
State	18500	19200	17200	-700	1300
Local	23800	24600	23300	-800	500

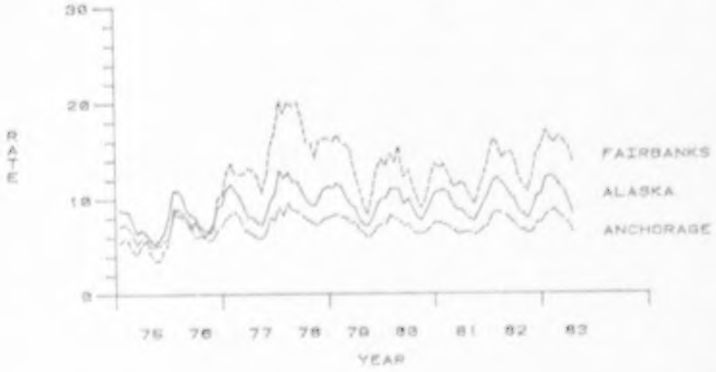
Prepared in cooperation with the U.S. Bureau of Labor Statistics.

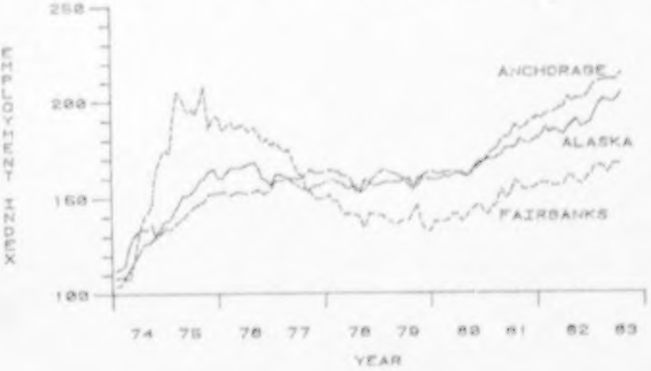
Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.


UNEMPLOYMENT RATES
NOT SEASONALLY ADJUSTED


COMPOSITE NONAG EMPLOYMENT INDEXES
SEASONALLY ADJUSTED

LABOR FORCE BY REGION AND CENSUS DIVISION

	Labor Force			Unemployment			Rate			Employment		
	P	*R*		*P*	*R*		*P*	*R*		*P*	*R*	
	7/83	6/83	7/82	7/83	6/83	7/82	7/83	6/83	7/82	7/83	6/83	7/82
Alaska Statewide	233541	226312	219386	19892	22257	19047	8.5	9.8	8.7	213649	204055	200339
Anchorage-Matsu Region	118449	117065	111906	8388	9257	8183	7.1	7.9	7.3	110061	107808	103723
Anchorage	106848	105587	100848	6987	7770	6737	6.5	7.4	6.7	99861	97817	94111
Matanuska-Susitna	11601	11478	11058	1401	1487	1446	12.1	13.0	13.1	10200	9991	9612
Gulf Coast Region	26619	24490	24812	2203	2916	2497	8.3	11.9	10.1	24416	21574	22315
Cordova	1373	1247	1276	66	92	81	4.8	7.4	6.3	1307	1155	1195
Kenai	13868	12761	13011	1427	1769	1641	10.3	13.9	12.6	12441	10992	11370
Kodiak	5794	5463	5450	219	537	355	3.8	9.8	6.5	5575	4926	5095
Seward	1928	1752	1746	187	214	155	9.7	12.2	8.9	1741	1538	1591
Valdez	3656	3267	3329	304	304	265	8.3	9.3	8.0	3352	2963	3064
Interior Region	29519	29917	27810	3955	4544	3316	13.4	15.2	11.9	25564	25373	24494
Fairbanks	24193	24452	22751	3356	3771	2787	13.9	15.4	12.3	20837	20681	19964
Southeast Fairbanks	2339	2362	2224	249	288	221	10.6	12.2	9.9	2090	2074	2003
Upper Yukon	735	778	697	112	159	100	15.2	20.4	14.3	623	619	597
Yukon-Koyukuk	2252	2325	2138	238	326	208	10.6	14.0	9.7	2014	1999	1930
Northern Region	10738	10969	9534	991	1058	867	9.2	9.6	9.1	9747	9911	8667
Barrow-North Slope	2836	2885	2558	207	212	220	7.3	7.3	8.6	2629	2673	2338
Kobuk	3413	3475	2977	388	399	287	11.4	11.5	9.6	3025	3076	2690
Nome	4489	4609	3999	396	447	360	8.8	9.7	9.0	4093	4162	3639
Southeast Region	34339	32685	32545	3094	3375	3150	9.0	10.3	9.7	31245	29310	29395
Angoon	487	458	466	73	70	77	15.0	15.3	16.5	414	388	389
Haines	1186	1149	1104	132	160	112	11.1	13.9	10.1	1054	989	992
Juneau	12390	11707	11500	1048	1067	829	8.5	9.1	7.2	11342	10640	10671
Ketchikan	7279	6881	7184	706	715	1001	9.7	10.4	13.9	6573	6166	6183
Outer Ketchikan	871	864	826	97	138	98	11.1	16.0	11.9	774	726	728
Prince of Wales	1683	1600	1518	237	244	158	14.1	15.3	10.4	1446	1356	1360
Sitka	4971	4679	4804	389	381	493	7.8	8.1	10.3	4582	4298	4311
Skagway	1668	1574	1547	149	140	109	8.4	8.9	7.0	1528	1434	1438
Wrangell-Petersburg	3804	3773	3596	272	460	273	7.2	12.2	7.6	3532	3313	3323
Southwest Region	13877	11186	12779	1261	1107	1034	9.1	9.9	8.1	12616	10079	11745
Aleutian Islands	3603	2905	3322	172	164	128	4.8	5.6	3.9	3431	2741	3194
Bethel	4559	3665	4192	546	459	456	12.0	12.5	10.9	4013	3206	3736
Bristol Bay Borough	482	380	441	29	18	20	6.0	4.7	4.5	453	362	421
Bristol Bay	1782	1448	1672	88	94	95	4.9	6.5	5.7	1694	1354	1577
Kuskowkim	1249	1004	1151	155	130	132	12.4	12.9	11.5	1094	874	1019
Wade Hampton	2202	1784	2001	271	242	203	12.3	13.6	10.1	1931	1542	1798

P/=Preliminary   1982 Benchmark

R/=Revised

Federal guidelines require the use of unrounded labor data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

ANCHORAGE-MATSU

By Greg Huff

Changes in Anchorage Employment Composition 1970-1982

The Anchorage economy has grown rapidly during the past dozen years. The relative industry contributions to employment have changed during this growth period. A brief discussion of this compositional change in Anchorage employment follows.

The table below lists Anchorage employment and percentage share for 1970 and 1982. The most dramatic change during the period was the relative decline in government employment, particularly federal government employment.

The industries showing the largest relative increases were services and mining. Services employment share increased nationally as well as in Anchorage during the 1970's. The increase in mining employment share is the result of oil corporation expansion in Anchorage. In general, the secondary industries (services, trade, finance and transportation) expanded their share of employment as government declined. With the exception of mining, the other basic industries (construction and manufacturing) remained stable.

Anchorage Employment and Industry Share

	Employment	Percentage	Employment	Percentage
Total	41,950	100.0%	95,350	100.0%
Mining	950	2.3	3,900	4.1
Construction	3,500	8.3	7,900	8.3
Manufacturing	1,000	2.4	2,300	2.4
Trans., Comm. & Util.	3,900	9.3	9,000	9.4
Trade	8,600	20.5	21,600	22.7
Finance, Ins. & R. Estate	2,000	4.8	6,000	6.3
Services	6,450	15.4	19,900	20.9
Government	15,550	37.1	24,800	26.0
Federal	9,500	22.7	9.850	10.3
State & Local	6,050	14.3	15,000	15.7

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE

				CHANGES FROM:	
	P/	R/			
	7/83	6/83	7/82	6/83	7/82
Nonag. Wage & Salary	106250	104350	100200	1900	6050
Mining	4200	4100	4050	100	150
Construction	10000	9250	9650	750	350
Manufacturing	3150	2650	3000	500	150
Food & Kindred Prod.	950	500	850	450	100
Other Mfg.	2200	2150	2150	50	50
Trans. Comm. & Util.	10150	10000	9600	150	550
Trucking & Whseing.	1600	1500	1450	100	150
Water Transportation	400	400	350	0	50
Air Transportation	3850	3750	3800	100	50
Other Trans. Comm. Utilities	4300	4350	4000	-50	300
Trade	24550	24750	22250	-200	2300
Wholesale Trade	5800	5750	5400	50	400
Retail Trade	18750	19000	16850	-250	1900
Gen. Merchandise	1850	1850	1700	0	150
Food Stores	2500	2600	2200	-100	300
Eating & Drinking Places	6800	6850	6300	-50	500
Other Retail Trade	7600	7700	6650	-100	950
Finance-Ins. & R. Estate	6700	6650	6300	50	400
Services & Misc.	22000	21550	20700	450	1300
Government	25500	25400	24650	100	850
Federal	9950	9850	10150	100	-200
State	6000	6250	5850	-250	150
Local	9550	9300	8650	250	900

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE-MATSU

				CHANGES FROM:	
	P/	R/			
	7/83	6/83	7/82	6/83	7/82
Nonag. Wage & Salary	112100	109950	104450	2150	7650
Mining	4500	4400	4250	100	250
Construction	10450	9650	9900	800	550
Manufacturing	3300	2750	3050	550	250
Trans. Comm. & Util.	10700	10550	9950	150	750
Trade	25650	25750	23100	-100	2550
Finance-Ins. & R. Estate	6950	6900	6500	50	450
Services & Misc.	23700	23200	21700	500	2000
Government	26850	26750	26000	100	850

FAIRBANKS/INTERIOR

By Neal Fried

Nonagricultural Employment

This year's Fairbanks nonagricultural wage and salary employment is the highest since the 1975-1976 pipeline years. While the pipeline era resulted in more jobs, the current surge in employment is much broader-based.

Growth has occurred in almost all industries, rather than only one or two. Employment expanded extremely rapidly during the pipeline years, but most workers were transient residents, and disappeared with the completion of the pipeline. While the 7% employment growth over the past three years has not been as rapid as the pipeline surge, the current labor force is more permanent. This results in community investment, which spurs additional employment growth.

Recent economic growth, although broadly distributed through the economy, is still based primarily on State oil revenue and resulting expenditures. This renders continued growth vulnerable to oil price changes. Later in the decade, when oil production on State land begins to decline, an employment contraction similar to the one following the pipeline's completion may not be out of the question.

Capital Budget Update

Last month's article discussed the proposed capital budget. With the capital budget now signed by the Governor, Fairbanks' budget remains a record of $106 million (approximately $14 million worth of projects were vetoed). Interior's (excluding Fairbanks) budget also remains a record at $90 million (approximately $8.5 million worth of projects were vetoed).

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
FAIRBANKS

	P/	*R/*		CHANGES FROM:	
	7/83	6/83	7/82	6/83	7/82
Nonag. Wage & Salary	26000	25450	24950	550	1050
Mining	200	150	250	50	-50
Construction	2750	2150	2650	600	100
Manufacturing	500	450	400	50	100
Trans. Comm. & Util.	3100	3100	3000	0	100
Trucking & Whseing.	650	650	600	0	50
Air Transportation	700	700	650	0	50
Other Trans. Comm. & Utilities	1750	1750	1750	0	0
Trade	5150	4950	4750	200	400
Wholesale Trade	850	850	850	0	0
Retail Trade	4300	4100	3900	200	400
Gen. Merchandise & Appaprel	450	450	450	0	0
Food Stores	850	750	650	100	200
Other Retail Trade	3000	2900	2800	100	200
Finance-Ins. & R. Estate	1000	900	950	100	50
Services & Misc.	5200	5000	5000	200	200
Government	8100	8750	7950	-650	150
Federal	2300	2300	2500	0	-200
State	3650	4200	3350	-550	300
Local	2150	2250	2100	-100	50

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
INTERIOR

	P/	*R/*		CHANGES FROM:	
	7/83	6/83	7/82	6/83	7/82
Nonag. Wage & Salary	29550	29400	28200	150	1350
Mining	400	400	450	0	-50
Construction	2900	2300	2800	600	100
Manufacturing	550	550	450	0	100
Trans. Comm. & Util.	3850	3850	3800	0	50
Trade	5550	5400	5000	150	550
Finance-Ins. & R. Estate	1050	1000	1000	50	50
Services & Misc.	5500	5350	5350	150	150
Government	9750	10550	9350	-800	400

GULF COAST

By Neal Fried

The Falling Unemployment Rate

Gulf Coast's unemployment rate finally fell below the double digit level in July, dropping to 8.3 percent. The biggest drop in the region occurred in Kodiak, where the unemployment rate fell 6 full percentage points (from 9.8% in June to 3.8% in July). Though this may appear to be a dramatic event, it is typical of summer in fisheries-dominated economies such as Kodiak and Cordova.

Most of this rapid decline can be attributed to the salmon fishery. Though the region as a whole did not have a particularly large harvest in July, fish caught more than 500 miles away kept the fish processors busy. The record catch of 38 million fish in Bristol Bay kept Gulf Coast processors booming this July. The exceptional Bristol Bay harvest boosted fish processing employment by 1,000 over year-ago levels and 2,500 over last month. Cook Inlet was the only region in the area that had a very good year. Cordova's harvest has been steady and Kodiak's has been below average.

One more month of salmon fishing will help to keep the rates down, but in September, when the season slacks off, the rates will rise as quickly as they fell.

Fishing related employment was only one of many industries that contributed to the region's improved employment picture. Wage and salary employment hit a high of 21,150 only once before surpassed in 1976 during the height of the pipeline construction. Oil revenues, a good salmon season and an exceptionally good tourism season thus far have pushed employment to new heights.

Capital Budget Update

The legislature's capital budget of $100 million for the region was pared by the Governor to $91 million with line item vetoes resulting in the lowest capital budget in 3 years.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
GULF COAST

				CHANGES FROM:	
	P/	*R/*			
	7/83	6/83	7/82	6/83	7/82
Nonag. Wage & Salary	21150	18650	19200	2500	1950
Mining	950	900	950	50	0
Construction	1950	1750	1600	200	350
Manufacturing	6050	3500	5050	2550	1000
Food & Kindred Prod.	5200	2700	4200	2500	1000
All Other Mfg.	850	800	850	50	0
Trans. & Comm. Util.	2000	1950	1900	50	100
Trade	2900	2800	2800	100	100
Wholesale Trade	450	450	450	0	0
Retail Trade	2450	2350	2350	100	100
Finance-Ins. & R. Estate	500	500	450	0	50
Services & Misc.	2800	2750	2600	50	200
Government	4000	4500	3850	-500	150
Federal	550	500	500	50	50
State	1400	1450	1300	-50	100
Local	2050	2550	2050	-500	0

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

SOUTHEAST ALASKA

By John Boucher

Southeast Alaska nonagricultural wage and salary employment grew 5.4% during June, led by a surge in seafood processing employment. Other industries showed mixed results, none of which were spectacular. Construction and retail trade posted gains over the month while lumber and paper, transportation, and government all contracted from their June levels.

Seafood processing employment more than doubled over the month, largely due to a strong pink salmon run. After starting very slowly, the Southeast fishery rolled into high gear late in the month. Two canneries operating in Ketchikan reported they were filled to capacity and turned away some seiners. The excellent run even generated employment outside of Southeast, as some of the pinks were shipped to Kodiak for processing.

Construction employment continued to climb in July, but by the smallest number of jobs since January. This indicates that construction is nearing its traditional late summer peak. Retail trade also posted a gain of 100 jobs over last month due to employment growth in eating and drinking establishments.

Government employment contracted by 500 jobs or 11% during July. Although some of the contraction was due to a decrease in state noneducational employment, most of the decrease was accounted for by large drops in education employment at the state and local level. In August's *Trends* it was reported that Mt. Edgecumbe High School had closed its doors for good in June. As of press time, negotiations are proceeding to reopen the school in September 1984 under state control.

Aside from government, the lumber and paper products sector experienced the largest decline over the month. A work stoppage against Louisiana-Pacific's Ketchikan operations is responsible for the drop. The spruce mill has been idled, but the pulp mill and logging operations have continued despite the labor dispute.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
SOUTHEAST ALASKA

	P/	R/		CHANGES FROM:	
	7/83	6/83	7/82	6/83	7/82
Nonag. Wage & Salary	32050	30400	30100	1650	1950
Construction	2700	2600	2000	100	700
Manufacturing	5750	3700	5000	2050	750
Food & Kindred Prod.	3600	1400	2400	2200	1200
Lumber & Paper Prod.	1900	2050	2350	-150	-450
All Other Mfg.	250	250	250	0	0
Trans. Comm. & Util.	2450	2500	2700	-50	-250
Trade	4900	4800	4450	100	450
Wholesale Trade	250	250	350	0	-100
Retail Trade	4650	4550	4100	100	550
Finance-Ins. & R. Estate	1050	1050	1050	0	0
Mining, Svcs. & Misc.	3750	3800	3950	-50	-200
Government	11450	11950	10950	-500	500
Federal	2300	2350	2250	-50	50
State	5700	5900	5250	-200	450
Local	3450	3700	3450	-250	0

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

HOURS AND EARNINGS

By Kathryn Lizik

Average hours and earnings in June remained relatively steady for all industries but manufacturing. A sharp employment rise in the food and kindred products sector, which carries a lower hourly wage than lumber and paper products precipitated an overall decline in the industry's average hourly earnings. Shortened average weekly hours in lumber and paper products, due to a June closure of the ALP sawmill in Wrangell also contributed to a 3% fall in manufacturing average weekly earnings.

ALASKA HOURS AND EARNINGS FOR SELECTED INDUSTRIES 1/ 2/

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	p/ 6/83	r/ 5/83	6/82	p/ 6/83	r/ 5/83	6/82	p/ 6/83	r/ 5/83	6/82
Mining	$23.72	$23.86	$20.74	50.2	48.3	54.6	$1190.74	$1152.44	$1132.40
Contract Construction 3/	22.88	23.11	22.69	43.6	43.6	44.6	997.57	1007.60	1011.97
Manufacturing	12.70	12.82	11.55	36.2	37.0	39.0	459.74	474.34	450.45
Food & Kindred Products	8.75	7.90	8.52	32.7	32.3	38.1	286.13	255.17	324.61
Lumber & Paper Products	16.46	16.21	14.95	39.8	43.6	41.5	655.11	706.76	620.43
Trans. Comm. & Util.	16.44	15.90	14.66	38.7	37.9	38.6	636.23	602.61	565.88
Trade	10.29	10.04	9.70	35.7	34.9	35.0	367.35	350.40	339.50
Wholesale Trade	11.75	11.66	11.89	38.4	38.1	38.1	451.20	444.25	453.01
Retail Trade	9.67	9.35	8.75	34.6	33.7	33.9	334.58	315.09	296.63
Finance-Ins. & R. Estate	—	—	—	—	—	—	348.08	369.81	336.09

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor

2/ Excludes eating and drinking establishments

3/ Due to technical revision in construction sample, 1982 estimates are not strictly comparable to previous years data.

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

10/13/83

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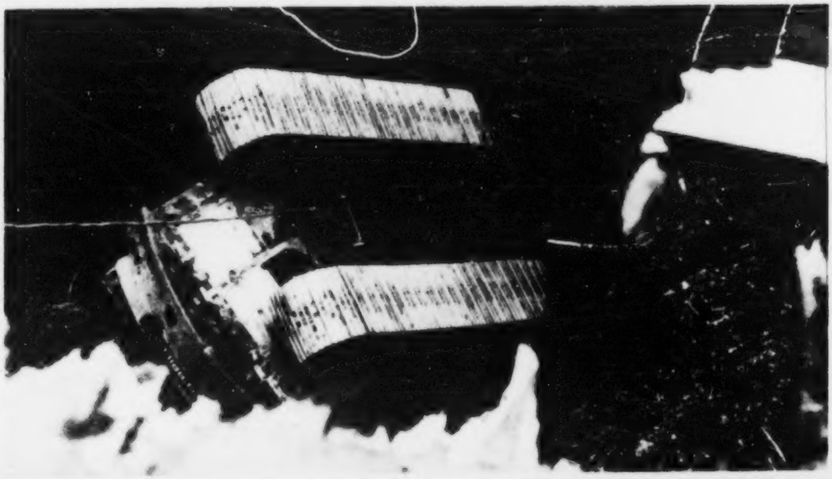
OCTOBER 1983

ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska



1 Work-Related Injuries

ALASKA ECONOMIC TRENDS

Bill Sheffield, *Governor, State of Alaska*

Jim Robison, *Commissioner, Department of Labor*

Judy Knight, *Director, Administrative Services*
Chuck Caldwell, *Chief, Research and Analysis*
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Funded by:

October 1983
Volume 3
Issue 10

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Alaska Economic Trends is published monthly by the Alaska Department of Labor, Research & Analysis Section, P.O. Box 1149, Juneau, Alaska 99802.

POSTMASTER: Send address change to ALASKA ECONOMIC TRENDS, P.O. BOX 1149, Juneau, Alaska 99802.

The following notes pertain to Nonagricultural Wage and Salary Employment Tables:

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1981.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

The Composite Nonagricultural Employment Indexes graph appearing on page 14 was rebased this month. The new base year is 1980 (1980 annual average employment = 100.0 for all three series).

WORK-RELATED INJURIES
A Statistical Highlight of 1981

By James Wilson

The 4th annual governor's safety conference that convened in Anchorage during the first week in October highlighted issues of safety in Alaska. This conference provided a forum for discussion among persons in all areas of safety. Coincident with this meeting was the release of two publications dealing with work related injuries in Alaska. The two reports are produced annually, in a cooperative effort with the U.S Bureau of Labor Statistics. "Occupational Injury and Illness Survey, Alaska 1981" provides incidence rate data for Alaska industries and is based on data collected directly from employers. "Work Injuries and Illnesses: the Supplementary Data System, Alaska 1981" describes the characteristics of work related injuries and is based on data filed with the Alaska Division of Workers' Compensation. Following is a brief summary of information contained in the two reports.

1981 Injury/Illness Rate One of the Lowest Ever

In 1981 Alaska's private sector occupational injury and illness rate was 10.0 cases per 100 workers. This rate equaled the lowest rate recorded (in 1978) in the ten year old annual survey. The 1981 rate is 32% lower than the high of 14.7 cases per 100 workers recorded in 1973. Alaska's private sector case rate is the sum of the injury case rate and the illness case rate. The private sector injury case rate, which has been stable for the last four years, held at the same level as recorded in 1980 (9.8). The rate for occupational illness cases in the private sector fell from an unusually high level in 1980 to its lowest level in several years. This drop in the illness rate is responsible for the decline in the overall case rate from 1980, since the injury rate was unchanged.

Cost of Time Loss Cases Over $8 Million

In addition to being the sum of injury and illness components, the private sector case rate can be subdivided into time loss and nontime loss case rates. The 1981 incidence rate for lost workday cases in the private sector was the lowest ever recorded in the annual survey, due largely to a record low time loss case rate in manufacturing industries. The nontime loss case rate rose slightly over its 1980 level (5.1 to 5.2). The average number of lost workdays per lost workday case remained unchanged (17 days) during the past four years. An estimate of the total number of lost workdays in the private sector would equal a loss of one year of work for 354 people. Measured in salary, the cost was over $8 million.

During 1981 the Alaska Division of Workers' Compensation processed 8,082 time loss claims, an increase of 10% over 1980. Private industry accounted for nearly 90% of all claims. Less than five percent of the time loss cases were due to occupational illness. Injuries are always most prevelant during the summer and early fall when Alaska's labor force is at its seasonal peak. In 1981, July was the peak month for on-the-job time loss injuries. Women filed 18.4% of the time loss claims during 1981 although they comprised a much higher percentage of the work force. This fact supports the contention that women workers tend to be found in less hazardous occupations.

Changes in High Risk Industries

During 1981 mining, construction, and manufacturing industries had substantial changes in their occupational injury and illness case incidence rates over 1980. The oil and gas industry had 23% growth in employment from 1980 to 1981 while the work injury and illness rate increased by 27% during this period. Construction employment increased at a rate unseen since the Trans-Alaska pipeline project. The rate of injuries and illnesses was the highest in seven years, surpassing the rate during peak pipeline construction. Manufacturing industries experienced the lowest total case rate in the ten years of the survey.

Both seafood processing and lumber and wood products rates fell dramatically. Heavy losses in employment levels were a major factor. In times of rising employment there are more inexperienced workers, who statistically incur most of the injuries. Thus when employment rises there is a tendancy for injury rates to rise. Conversely, when employment drops the rate may go down as well.

Construction Employment and Injuries Increase

For the first time since 1977, the construction industry lead all others in the number of time loss cases. This is largely due to increases in construction employment in the last few years. Construction accounted for 19.3% of all cases while comprising only 7.8 of the nonfederal employment. Craftsmen, operators (excluding transport), and laborers, with nearly two-thirds of the claims, consistently lead all occupational groups in numbers of time loss cases. These occupations are typically associated with mining, construction, logging, and seafood processing industries.

Back Most Frequently Injured

Data for several years show that sprains and strains continue to be the leading type of injury (45.2% of the total). The back, involved in one-fourth of all time loss cases, is the most frequently injured part of the body.

Ten Highest Incidence Rate Industries
Alaska 1981

Industry	SIC 1/	1981 2/ Annual Employment	Incidence Rate 3/ 1980	Incidence Rate 3/ 1981	Percent Change	1980 Rank
Lumber & Wood Prod.	24	2,031	32.5	26.8	-17.5	1
Food & Kindred Prod.	20	6,871	26.7	22.2	-16.9	2
Building Construction	15	2,733	16.5	19.8	+20.0	5
Trucking & Whseing.	42	2,039	21.7	17.8	-18.0	3
Special Trade Contrs.	17	5,521	15.9	17.8	+12.0	7
Water Transportation	44	1,356	16.2	16.6	+2.5	6
Oil & Gas Extraction	13	7,328	12.4	15.8	+27.4	—
Heavy Const. Contrs.	16	4,213	17.3	15.1	-12.7	4
Electric, Gas, & Sanit.	49	1,367	14.6	13.9	-4.8	9
Air Transportation	45	5,419	13.2	13.6	+3.0	10

1/ *Standard Industrial Classification Manual*, 1972 Edition.

2/ Annual average employment figures are based on Employer Data (ES-202) from Alaska's Employment Security Division. These data were produced using information available at the time of this report, but may differ from those elsewhere in the publication.

3/ Incidence rates represent the equivalent number of injuries and illnesses per 100 full time workers. Since many workers in higher rate industries are employed less than full time during a year, the actual proportion of injured workers is less than implied by the incidence rate.

Source: *Annual Survey of Occupational Injuries and Illnesses, 1980 and 1981;* Research and Analysis Section, Alaska Department of Labor in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

Sprains and strains are the most common back injuries. During 1981, as in prior years, overexertion was the leading cause of injury. In this year 85% of all overexertion cases were sprains and strains. The proportion of time loss cases due to overexertion has grown steadily since 1976 and overexertion now accounts for 26% of all injuries.

TGIF

Claim data for 1979, 1980 and 1981 show Monday to be the most hazardous day of the regular work week, while Friday was the most injury free day. Over one-half of all time loss injuries involved employees who had been on the job one year or less. In construction and manufacturing at least 20% of the cases occurred during an employee's first month on the the job.

Aircraft Related Deaths

Alaska's dependence upon commercial and private aviation has resulted in a high proportion of work-related deaths occurring in aircraft accidents. In 1981, 53% of on the job deaths involved aircraft. The proportion has been at least this high for three of the last four years.

The two publications highlighted above may be obtained from the Research and Analysis Section, Alaska Department of Labor, Box 1149 Juneau, Alaska 99802. Contact Jim Wilson (907) 465-4520 for further information on Alaskas Occupational Injury and Illness Statistics.

ALASKA NONAGRICULTURAL EMPLOYMENT TRENDS: 1978 THROUGH MID-1983

By Brit Harvey

Nonagricultural wage and salary employment is the most important single measure of economic activity at the state level. Gross National Product, the most important national measure, is not generally available for states. Due to a data processing problem, actual counts of Alaska nonagricultural employment were delayed. The data processing problem was corrected, and the actual counts have now been brought up to date. This article describes the methodology used to estimate nonagricultural employment, analyzes the newly available employment data, and discusses the accuracy of employment estimates and forecasts.

Methodology for Estimating Nonagricultural Employment

Actual counts of nonagricultural employment are derived from unemployment insurance records in a program referred to as ES-202. The actual counts are normally delayed six to nine months.

The nonagricultural employment estimates published in *Alaska Economic Trends* lag one month. Normally, estimates for which actual counts have become available are replaced each January, and succeeding estimates are adjusted to reflect the more accurate actual counts. This replacement and reestimation process is referred to as "benchmark".

This process broke down when the actual counts were delayed 24 months rather than the usual six to nine months. The estimates in *Alaska Economic Trends* became increasingly less reliable as the benchmark correction process was delayed due to unavailable actual counts. The crucial period affected by the data processing breakdown was January 1981 through July 1983. The extremely rapid growth of the Alaska economy during this period exacerbated the estimation problem.

A special benchmark was done in September utilizing newly available actual counts. The nonagricultural employment series are now up to date. The remainder of this article analyzes these newly available data.

Employment Trends 1978-1983

Table 1 lists annual average employment for the years 1978 through 1983. (1983 is an average through August only.) Table 2 lists percentage changes in employment for each year. (1983 is compared to the corresponding period in 1982.)

In 1980 the Alaska economy began a period of robust growth which is currently continuing. The primary cause of this growth is State expenditure of oil wealth. State expenditures induce a characteristic pattern of industry growth, typified by extremely rapid construction expansion, rapid State employment expansion, and rapid, broad-based expansion in the secondary industries. This compositional pattern is evident throughout the boom period. In addition, more ephemeral economic events have had a strong influence in particular years.

As indicated in Table 2, 1979 was the second and final year of the post-pipeline lull in the Alaska economy. Sharp declines in construction and seafood processing employment were almost balanced by increases in state and local government employment.

The current boom began in 1980, when employment expanded by 7.0%. The pattern of industry growth caused by increasing State expenditures began to emerge. This transitional year saw a 30.5% increase in construction employment and 8.0% increase in services employment, a major secondary industry. State government and the other secondary industries did not join in the expansion, however.

Three factors unrelated to state spending made important contributions to 1980 growth. Oil and gas employment grew 15.5%. This was partially the result of a nationwide boom in oil and gas following the 1979 oil price increase. Seafood processing employment almost doubled, due to strong salmon and crab harvests. 1980 also saw strong demand for Alaska logs, cants and pulp, boosting employment. While these factors were important generators of employment growth in 1980, they were anomalies which have not had a continuing impact.

The State spending-induced growth pattern became firmly established in 1981, the peak year for employment expansion during the 1978-1983 period. Construction employment increased by 20.9%, State government employment by 7.6%, local government employment (strongly influenced by State funding) by 10.2%, and the secondary industries by 13.2% (trade), 9.5% (services), and 7.2% (finance, insurance, and real estate). Augmenting this State spending-induced growth was a 32.1% increase in oil and gas employment. 1981 was the second and final year of petroleum expansion following the 1979 price hike.

During 1982 and the first eight months of 1983, employment growth continued, due almost entirely to State spending and its indirect effects. Declines in fish processing, lumber and pulp, and oil and gas employment were overwhelmed by expansion in construction, state government, trade, services, and finance, insurance and real estate.

Table 1
Annual Average Nonagricultural Employment
1982 Benchmark (Completed 9/83)

	1978	1979	1980	1981	1982	1983 1/
Total	162,492	159,430	170,525	186,111	199,508	209,500
Mining	5,517	5,606	6,671	8,915	8,977	8,200
Oil and Gas	5,138	5,321	6,146	8,117	8,221	7,500
Construction	12,150	8,177	10,672	12,901	16,780	18,000
Manufacturing	11,398	9,475	14,105	13,971	12,649	13,900
Food and Kindred	6,207	4,069	7,966	8,115	6,935	8,100
Lumber and Pulp	2,861	2,965	3,482	3,164	2,883	2,800
Other Manufacturing	2,330	2,441	2,657	2,692	2,831	3,000
Trans. Comm. & Utilities	16,240	16,508	17,156	18,249	18,399	18,800
Trade	28,609	28,914	29,314	33,194	37,547	41,100
Wholesale	5,718	5,310	5,538	6,449	7,206	7,800
Retail	22,891	23,604	23,776	26,745	30,341	33,300
Finance-Ins. & R. Estate	8,617	8,149	8,134	8,723	9,562	10,500
Services	28,387	27,924	30,154	33,021	35,964	38,600
Government	51,575	54,697	54,319	57,136	59,630	60,500
Federal	18,117	17,597	17,981	17,479	17,642	17,400
State	14,376	15,298	15,406	16,583	17,995	19,100
Local	19,083	21,802	20,932	23,074	23,993	23,900

1/ First eight months, average monthly estimated employment.

State spending influences economic expansion in a variety of ways. State employment increases and massive State construction funding are the most obvious. The secondary industries are stimulated directly by State purchases and subsidized business loans, and indirectly by Permanent Fund dividends, tourism advertising, and processing of State-subsidized home loans, to mention a few mechanisms.

State spending-induced employment growth, in combination with the recession in the rest of the U.S., resulted in rapid population growth in Alaska. This population growth is in itself a major stimulus to the economy. Increasing population allows more goods and services to be provided locally, boosting secondary industry employment.

The current boom will likely enter a plateau phase sometime in late 1984 or

Table 2
Percentage Change in Annual Average Nonagricultural Employment
1982 Benchmark

	78-79	79-80	80-81	81-82	82-83 1/
Total Nonagricultural	-1.9	7.0	9.1	7.2	6.2
Mining	1.6	19.0	33.6	0.7	-12.3
Oil and Gas	3.6	15.5	32.1	1.3	-12.6
Construction	-32.7	30.5	20.9	30.1	14.6
Manufacturing	-16.9	48.9	-1.0	-9.5	5.8
Food and Kindred	-34.4	95.8	1.9	-14.5	8.2
Lumber and Pulp	3.6	17.4	-9.1	-8.9	-1.5
Other Manufacturing	4.8	8.8	1.3	5.2	6.9
Trans. Comm. & Utilities	1.7	3.9	6.4	0.8	2.2
Trade	1.1	1.4	13.2	13.1	11.9
Wholesale	-10.3	4.3	16.4	11.7	9.4
Retail	3.1	0.7	12.5	13.4	12.5
Finance-Ins. & R. Estate	-5.4	-0.2	7.2	9.6	11.8
Services	-1.6	8.0	9.5	8.9	8.2
Government	6.1	-0.7	5.2	4.4	2.9
Federal	-2.9	2.2	-2.8	0.9	-1.7
State	6.4	0.7	7.6	8.5	8.5
Local	14.2	-4.0	10.2	4.0	1.7

1/ Percentage change, first eight months 1983 average estimated employment from corresponding period in 1982.

1985. As State expenditures decline as a result of diminished oil revenue, the impetus for growth will fade.

1981 Estimation Error

The employment estimates which appear in *Alaska Economic Trends* are based on a sample of employers and/or analyst judgement. In some industries the sample, which is voluntary, is either nonexistent or very small. For this reason, the estimates are subject to error. Table 3 lists the percentage error of the employment estimates for 1982.

The first column lists the estimates as they originally appeared in *Alaska Economic Trends*. At the time these estimates were made actual counts of employment were available only through June 1980. The second column lists the estimates as they were revised following availability of actual counts through June 1981. These estimates appeared as appendix tables in

Table 3
1982 Annual Average Employment
1980 and 1981 Benchmark Estimation Error

	1980 1/ Benchmark	1981 2/ Benchmark	1982 3/ Benchmark	% Error 1980 Benchmark	% Error 1981 Benchmark
Total Nonagricultural	188,300	194,400	199,508	-5.6	-2.6
Mining	8,300	9,100	8,977	-7.5	1.4
Oil and Gas	7,500	8,200	8,221	-8.8	-0.1
Construction	14,600	14,500	16,780	-13.0	-13.6
Manufacturing	10,400	11,100	12,649	-17.8	-12.2
Food and Kindred	4,900	5,700	6,935	-29.3	-17.8
Lumber and Pulp	2,500	2,700	2,883	-13.3	-6.3
Other Mfg.	3,000	2,700	2,831	6.0	-4.6
Trans. Comm. & Util.	18,500	18,400	18,399	0.5	0.0
Trade	33,600	35,600	37,547	-10.5	-5.2
Wholesale	6,700	7,100	7,206	-7.0	-1.5
Retail	26,900	28,500	30,341	-11.3	-6.1
Fin.-Ins. & R. Estate	9,200	9,400	9,562	-3.8	-1.7
Services	33,300	35,000	35,964	-7.4	-2.7
Government	60,400	61,200	59,630	1.3	2.6
Federal	17,800	17,900	17,642	0.9	1.5
State	17,600	17,900	17,995	-2.2	-0.5
Local	24,900	25,400	23,993	3.8	5.9

1/ 1980 Benchmark estimates were based on actual counts through 6/80.
2/ 1981 Benchmark estimates were based on actual counts through 6/81.
3/ 1982 Benchmark data are actual counts through 12/82.

the March 1983 issue of *Alaska Economic Trends.* The third column lists the actual counts derived from unemployment insurance payment records. The fourth and fifth columns list the percentage error of the estimates.

As can be seen in Table 3, the lack of actual counts resulted in large estimating errors for some industries. In general, industries which expanded rapidly during 1980-1982 were underestimated, in some cases substantially. Industries which were more stable, such as federal government and transportation, communication, and utilities, had small estimation errors. This results partially from the estimating methodology, which is vulnerable to underestimation during periods of rapid expansion, and to excessively conservative analyst judgement.

Table 4
1982 Employment Forecasts
Percentage Change, 1981 to 1982 Annual Averages

	Alaska Pacific Bank 1/	Office of Management & Budget 2/	Department of Labor 3/	Actual Count
Total Nonagricultural	5.0+%	5.0%	4.4%	7.2%
Mining		7.4	11.1	0.7
Construction		8.6	7.3	30.1
Manufacturing		9.8	4.6	-9.5
Trans. Comm. & Utilities		4.6	2.3	0.8
Trade		5.5	4.4	13.1
Finance-Ins. & R. Estate		7.7	3.6	9.6
Services		3.4	5.1	8.9
Government		3.3	3.2	4.4

1983 Employment Forecasts

	Alaska Pacific Bank 4/	Office of Management & Budget 5/	Department of Labor 6/	First 8 Months Estimates
Total Nonagricultural	2.0%	1.9%	4.8%	6.2%
Mining		7.2	8.6	-12.3
Construction	0.0	-2.9	1.4	14.6
Manufacturing		5.9	11.5	5.8
Trans. Comm. & Utilities		2.1	4.9	2.2
Trade		2.4	4.5	11.9
Finance-Ins. & R. Estate		0.0	3.2	11.8
Services		3.0	5.7	8.2
Government		0.0	3.3	2.9

Footnotes:

1/ *Alaska Business Trends, 1982 Economic Forecasts:* (publishing date not given); Alaska Pacific Bank.
2/ *AEIRS Quarterly Report, October 1981;* Alaska Office of the Governor, Division Budget and Management.
3/ *Alaska Annual Planning Information 1982;* January 1981; Alaska Department of Labor, Reserach and Analysis.
4/ *Alaska Business Trends, 1983 Economic Forecasts;* (publishing date not given); Alaska Pacific Bank.
5/ *AEIRS Quarterly Report, November 1982;* Alaska Office of the Governor, Division of Budget and Management.
6/ *Alaska Annual Planning Information 1983;* January 1982; Alaska Department of Labor, Research and Analysis.

Forecast Error-1982-83

Several organizations publish forecasts of Alaska nonagricultural employment on an ongoing basis. Table 4 compares actual employment counts for 1982 and current employment estimates for the first eight months of 1983 to forecasts for 1982 and 1983. The forecasts were made by Alaska Pacific Bank, Office of the Governor (Division of Management and Budget), and Alaska Department of Labor. In all cases, the forecasts listed are one year ahead forecasts expressed as percentage change in annual average employment.

The forecasts for 1982 were consistently low, although not by a large margin. If estimates for the first eight months of 1983 are indicative of what the actual counts for the entire year will be, the under-forecasting problem became worse for 1983 forecasts. In general, economists have misjudged both the strength and duration of the current boom.

Two factors obviously contributed to this forecast error. The delay of actual employment counts contributed to the substantial underestimation of employment noted earlier. The low estimates contributed in turn to low forecasts. Additionally, many economists thought that declining oil prices would quickly effect the Alaska economy. As has now become clear, only the oil and gas industry was quickly affected. State expenditures, which are driving growth, are affected by declining revenues only after a substantial lag. At the time of this writing, almost two years after oil prices began to decline, State expenditures appear to be largely unaffected by revenue declines. (See "Cash-on-the-Street" article in September, 1983 *Alaska Economic Trends).*

Summary

A data processing problem delayed the availability of actual counts of Alaska nonagricultural employment. Due to this delay, substantial error resulted in employment estimates. This underestimation of employment contributed to uniformly low forecasts.

The data processing problem was corrected, and actual counts are now up to date. A much clearer picture of Alaska's recent economic growth is now available. Estimates, and perhaps forecasts, should be subject to less error now that actual counts are available.

ALASKA

By John Boucher

August nonagricultural wage and salary employment for Alaska was 231,400 which has slightly above the July level and 5.1% above August 1982. The relatively small month to month change was due to several offsetting gains and losses.

Food and kindred products declined by 14.6% over the month. This decrease was expected following the record sockeye salmon run in July in Southwestern Alaska. The decline in manufacturing was offset by gains in local government and construction. Local government grew by 2,600 jobs or 12.7% over the month, and construction employment increased 1,100 jobs or 4.8%. Local government growth in August is due to local school district employees returning from summer vacations, while construction buildup is common in the late summer months, usually hitting its peak in September.

Unemployment

Alaska unemployment continued its summer decline, dropping by four-tenths of a point to 8.1%. For the second month in a row Alaska's unemployment rate has shown a slight improvement compared to last year. This could be the result of a robust Alaskan economy, or a lessening of in-migration pressures due to a healthier lower-48 economy. The most probable explanation is a combination of these two factors.

LABOR FORCE BY REGION AND CENSUS DIVISION

	Labor Force			Unemployment			Rate			Employment		
	P	*R*		*P*	*R*		*P*	*R*		*P*	*R*	
	8/83	7/83	8/82	8/83	7/83	8/82	8/83	7/83	8/82	8/83	7/83	8/82
Alaska Statewide	233153	233429	221261	18981	19893	18368	8.1	8.5	8.3	214172	213536	202893
Anchorage-Matsu Region	118069	116850	112831	8040	8378	8261	6.8	7.2	7.3	110029	108472	104570
Anchorage	106473	105400	101724	6641	6980	6845	6.2	6.6	6.7	99832	98420	94879
Matanuska-Susitna	11596	11450	11107	1399	1398	1416	12.1	12.2	12.7	10197	10052	9691
Gulf Coast Region	28102	28421	25483	2215	2226	2079	7.9	7.8	8.2	25887	26195	23404
Cordova	1433	1469	1294	47	67	41	3.3	4.6	3.2	1386	1402	1253
Kenai	14672	14786	13309	1482	1439	1384	10.1	9.7	10.4	13190	13347	11925
Kodiak	6142	6205	5586	231	224	242	3.8	3.6	4.3	5911	5981	5344
Seward	2005	2056	1850	159	188	181	7.9	9.1	9.8	1846	1868	1669
Valdez	3850	3905	3444	296	308	231	7.7	7.9	6.7	3554	3597	3213
Interior Region	31112	30638	27796	4135	3956	3074	13.3	12.9	11.1	26977	26682	24722
Fairbanks	25491	25103	22723	3503	3356	2573	13.7	13.4	11.3	21988	21747	20150
Southeast Fairbanks	2462	2432	2214	256	250	193	10.4	10.3	8.7	2206	2182	2021
Upper Yukon	780	763	686	122	112	83	15.6	14.7	12.1	658	651	603
Yukon-Koyukuk	2379	2340	2173	254	238	225	10.7	10.2	10.4	2125	2102	1948
Northern Region	11658	11405	9897	1059	1010	842	9.1	8.9	8.5	10599	10395	9055
Barrow-North Slope	3101	3016	2648	242	212	206	7.8	7.0	7.8	2859	2804	2442
Kobuk	3698	3620	3100	409	394	290	11.1	10.9	9.4	3289	3226	2810
Nome	4859	4769	4149	408	404	346	8.4	8.5	8.3	4451	4365	3803
Southeast Region	32545	32369	32552	2611	3064	2754	8.0	9.5	8.5	29934	29305	29798
Angoon	470	457	470	74	69	76	15.7	15.1	16.2	396	388	394
Haines	1097	1114	1110	87	125	105	7.9	11.2	9.5	1010	989	1005
Juneau	11778	11633	11548	912	996	729	7.7	8.6	6.3	10866	10637	10819
Ketchikan	6789	6836	7164	492	671	896	7.2	9.8	12.5	6297	6165	6268
Outer Ketchikan	804	818	834	62	92	96	7.7	11.2	11.5	742	726	738
Prince of Wales	1572	1580	1543	187	224	164	11.9	14.2	10.6	1385	1356	1379
Sitka	4733	4669	4728	343	371	358	7.2	7.9	7.6	4390	4298	4370
Skagway	1664	1690	1536	200	257	79	12.0	15.2	5.1	1464	1433	1457
Wrangell-Petersburg	3638	3572	3619	254	259	251	7.0	7.3	6.9	3384	3313	3368
Southwest Region	11667	13746	12702	921	1259	1358	7.9	9.2	10.7	10746	12487	11344
Aleutian Islands	3056	3568	3256	134	172	171	4.4	4.8	5.3	2922	3396	3085
Bethel	3828	4516	4224	409	544	615	10.7	12.0	14.6	3419	3972	3609
Bristol Bay Borough	402	477	438	16	29	31	4.0	6.1	7.1	386	448	407
Bristol Bay	1514	1765	1649	71	88	126	4.7	5.0	7.6	1443	1677	1523
Kuskokwim	1046	1237	1140	114	154	156	10.9	12.4	13.7	932	1083	984
Wade Hampton	1821	2183	1995	177	272	259	9.7	12.5	13.0	1644	1911	1736

P/=Preliminary 1982 Benchmark

R/=Revised

Federal guidelines require the use of unrounded labor data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA

				CHANGES FROM:	
	P/	*R/*			
	8/83	7/83	8/82	7/83	8/82
Nonag. Wage & Salary	231400	230600	220200	800	11200
Mining	8600	8600	9600	0	-1000
Construction	24200	23100	21900	1100	2300
Manufacturing	22300	24900	20600	-2600	1700
Food & Kindred Prod.	15800	18500	14300	-2700	1500
Lumber & Paper Prod.	3200	3200	3300	0	-100
All Other Mfg.	3300	3200	3000	100	300
Trans. Comm. & Util.	20000	20200	19700	-200	300
Trucking & Whseing.	2600	2500	2600	100	0
Water Transportation	1500	1600	1700	-100	-200
Air Transportation	5900	6100	6100	-200	-200
Other Trans. Comm. & Utilities	10000	10000	9300	0	700
Trade	43900	44000	40700	-100	3200
Wholesale Trade	8400	8400	7600	0	800
Retail Trade	35500	35600	33100	-100	2400
Gen. Merchandise & Apparel	5200	5300	4800	-100	400
Food Stores	6500	6600	5200	-100	1300
Eating & Drinking Places	12500	12400	12300	100	200
Other Retail Trade	11300	11300	10800	0	500
Finance-Ins. & R. Estate	11000	11100	9900	-100	1100
Services & Misc.	42000	41500	38300	500	3700
Government	59400	57200	59500	2200	-100
Federal	17900	18100	18100	-200	-200
State	18400	18600	17800	-200	600
Local	23100	20500	23600	2600	-500

Prepared in cooperation with the U.S. Bureau of Labor Statistics.

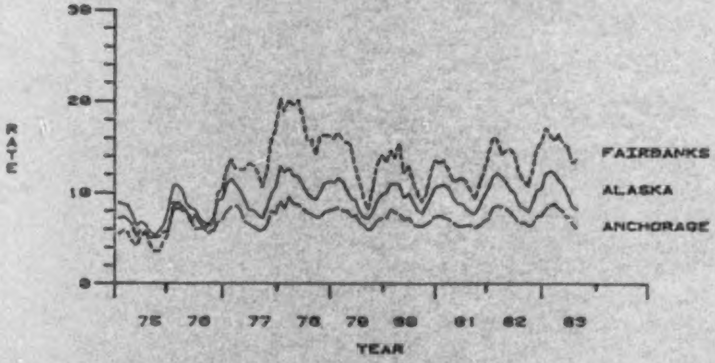
Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1982.

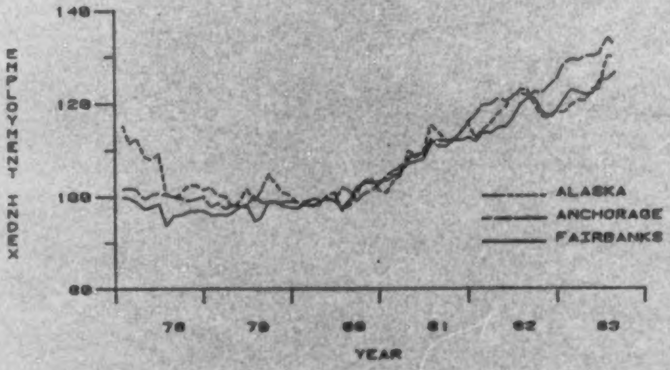
P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

UNEMPLOYMENT RATES
NOT SEASONALLY ADJUSTED



COMPOSITE NONAG EMPLOYMENT INDEXES
SEASONALLY ADJUSTED



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ANCHORAGE-MATSU

By Greg Huff

Unemployment

The Anchorage-Matsu region unemployment rate in August declined to 6.8%. The rate was below the previous year and the lowest August rate since 1977. Although the August rate was low compared to past years, the average unemployment rate through August 1983 has averaged 8.4%, the highest since 1979. Through August an average of 9,560 persons have been unemployed.

Matsu's Commuting Characteristics

The Matanuska-Susitna Borough has the State's highest percentage of workers commuting outside the Borough. The newly released 1980 census statistics on commuting characteristics reveal that 32% of the borough residents travel outside the borough to work, compared to only 3% of Anchorage workers. In 1970, 29% of the borough workers traveled outside for their jobs. Although the percent of Matsu residents commuting to Anchorage or elsewhere only increased 3 percentage points, the number of workers commuting increased 460%.

In 1980 all Matsu workers commuted an average of 31 minutes to work and 33% of the workers drove 45 minutes or more. The private vehicle was the favorite mode of transportation with 79% driving to work in private vehicles. Sixty-eight percent drove alone, compared to 32% driving in a carpool of 1 or more other persons. Four-tenths of a percent traveled to work using public transportation.

Nonagricultural Employment

Anchorage nonagricultural wage and salary employment increased during August by 1.1% to 110,700. At the industry level construction, trade and services provided the bulk of the monthly increase. Government employment declined due to school employment decreases.

In general, the Anchorage economy is continuing to grow at a rapid pace. Only a slight slowing has occurred during the first eight months of 1983. August nonagricultural employment was 9.2% higher than last year. Construction employment growth is down, however, from 29% in 1982 to 14% for the first eight months of 1983. The moderation of growth in construction, which has driven economic expansion during the past three years, is a likely harbinger of slower growth in the overall Anchorage economy.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE

	P/ 8/83	R/ 7/83	8/82	CHANGES FROM: 7/83	 8/82
Nonag. Wage & Salary	110700	109550	101350	1150	9350
Mining	3350	3350	3350	0	0
Construction	11700	10950	10200	750	1500
Manufacturing	3400	3450	2900	-50	500
Food & Kindred Prod.	950	1100	950	-150	0
Other Mfg.	2450	2350	1950	100	500
Trans. Comm. & Util.	9650	9600	8850	50	800
Trucking & Whseing.	1300	1350	1300	-50	0
Water Transportation	350	350	400	0	-50
Air Transportation	3900	3850	3500	50	400
Other Trans. Comm. & Utilities	4100	4050	3650	50	450
Trade	25700	25400	23950	300	1750
Wholesale Trade	6150	6100	5450	50	700
Retail Trade	19550	19300	18500	250	1050
Gen. Merchandise	1700	1800	1650	-100	50
Food Stores	2550	2550	2400	0	150
Eating & Drinking Places	7400	7250	7350	150	50
Other Retail Trade	7900	7700	7100	200	800
Finance-Ins. & R. Estate	7250	7200	6450	50	800
Services & Misc.	24650	24250	22000	400	2650
Government	25000	25350	23650	-350	1350
Federal	10450	10400	9900	50	550
State	6100	6100	6000	0	100
Local	8450	8850	7750	-400	700

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE-MATSU

	P/ 8/83	R/ 7/83	8/82	CHANGES FROM: 7/83	 8/82
Nonag. Wage & Salary	117050	115650	107200	1400	9850
Mining	3500	3450	3450	50	50
Construction	12800	11950	11400	850	1400
Manufacturing	3800	3950	3300	-150	500
Trans. Comm. & Util.	10200	10200	9300	0	900
Trade	26950	26550	25000	400	1950
Finance-Ins. & R. Estate	7550	7450	6650	100	900
Services & Misc.	25800	25450	23100	350	2700
Government	26450	26650	25000	-200	1450

"Please see notes on back of title page."

FAIRBANKS/INTERIOR

By Neal Fried

Unemployment

Fairbanks' unemployment rate climbed to 13.7% in August. In most years the seasonal increase in unemployment begins later than August. Though employment growth has been strong, the job market remains highly competitive.

Employment

In August, Fairbanks' wage and salary employment climbed above the 28,000 mark for the second time this year. The last time employment reached this level was seven years ago during pipeline construction.

The big contributors in August to the over-the-year growth were construction, trade and government. Retail trade employment has grown the most in absolute terms. This entire industry has been expanding with the establishment of new outlets and the hiring of additional staff at existing stores.

One niche in Fairbanks' retail industry which as been growing particularly rapidly is the eating and drinking sector. Of the 29 new retail businesses established over the past three years, more than half are in the restaurant and bar business. This is part of a national trend resulting from changing work habits and demographic shifts. In the past year, the Fairbanks pace has accelerated. Some say Fairbanks' appetite for new eating places is insatiable. Fairbanks' population and employment is growing and income is on the rise, giving Fairbanks an extra boost over much of the nation.

Employment in construction in August probably reached its peak level for the year. By August, the number of building permits for residential units grew to 799, double last year's number for the same period, making it the biggest year in five years. Approximately 68% of these permits are for multi-family units, with the Wise apartment complex of 144 units the single largest project. This should provide some relief to the very tight rental market in Fairbanks. Construction employment is also being boosted by a flurry of activity in commercial and public projects. Several large projects are in full swing, including the expansion of the airport, hospital and university library, construction of the new Borough building, North Gate Square mall, and a variety of smaller commercial and public projects.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
FAIRBANKS

				CHANGES FROM:	
	P/	R/			
	8/83	7/83	8/82	7/83	8/82
Nonag. Wage & Salary	28700	28600	27250	100	1450
Mining	350	300	350	50	0
Construction	3750	3600	3400	150	350
Manufacturing	550	600	500	-50	50
Trans. Comm. & Util.	3000	3050	3050	-50	-50
Trucking & Whseing.	400	400	550	0	-150
Air Transportation	650	700	600	-50	50
Other Trans. Comm. & Utilities	1950	1950	1900	0	50
Trade	5750	5700	5150	50	600
Wholesale Trade	900	900	900	0	0
Retail Trade	4850	4800	4250	50	600
Gen. Merchandise & Apparel	450	450	400	0	50
Food Stores	850	850	650	0	200
Other Retail Trade	3550	3500	3200	50	350
Finance-Ins. & R. Estate	1050	1050	1150	0	-100
Services & Misc.	5650	5350	5550	300	100
Government	8600	8950	8100	-350	500
Federal	2200	2500	2500	-300	-300
State	4150	4200	3600	-50	550
Local	2250	2250	2000	0	250

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
INTERIOR

				CHANGES FROM:	
	P/	R/			
	8/83	7/83	8/82	7/83	8/82
Nonag. Wage & Salary	32600	32300	31300	300	1300
Mining	500	450	550	50	-50
Construction	3900	3750	3500	150	400
Manufacturing	600	600	550	0	50
Trans. Comm. & Util.	3850	3850	3850	0	0
Trade	6300	6300	5650	0	650
Finance-Ins. & R. Estate	1100	1100	1200	0	-100
Services & Misc.	6200	5850	5900	350	300
Government	10150	10400	10100	-250	50

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GULF COAST

By Neal Fried

Employment Begins to Fall

The region's employment entered its seasonal downswing in August after three months of strong activity. This is typical of August, as the salmon season winds down. Fish processing employment fell by 400 in August, and will experience steeper declines in coming months.

During most of this year, and particularly during the summer months, fish processing employment was above last year. This will end later this year, due to the closure of the region's crab fishery.

Although reliable measures of tourism in the region are lacking, most indicators point to an increase in tourism during 1983. The Copper River and Kenai Peninsula state park districts recorded larger numbers of visitors this year, with the Kenai district breaking all records. In response to an informal survey, a majority of hotels in the region stated that they were busier this year than last. Anchorage tourists were attracted to the Kenai area by the completion of Seward highway repairs and excellent summer weather.

Generally, employment in most industries remained unchanged or increased slightly in August. Almost all remain above last year's levels.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
GULF COAST

				CHANGES FROM:	
	P/	R/			
	8/83	7/83	8/82	7/83	8/82
Nonag. Wage & Salary	23300	23900	22600	-600	700
Mining	800	850	850	-50	-50
Construction	2200	2050	1950	150	250
Manufacturing	6800	7200	6700	-400	100
Food & Kindred Prod.	5950	6350	5900	-400	50
All Other Mfg.	850	850	800	0	50
Trans. & Comm. & Util.	2100	2150	2050	-50	50
Trade	3250	3200	3200	50	50
Wholesale Trade	550	550	500	0	50
Retail Trade	2700	2650	2700	50	0
Finance-Ins. & R. Estate	500	500	500	0	0
Services & Misc.	3300	3600	3200	-300	100
Government	4350	4350	4150	0	200
Federal	500	500	500	0	0
State	1400	1450	1450	-50	-50
Local	2450	2400	2200	50	250

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SOUTHEAST ALASKA

By John Boucher

Southeast Alaska nonagricultural wage and salary employment grew by 1.9% in August, led for the second consecutive month by a surge in seafood processing employment. Construction and government were the only other industries to experience any notable change during the month.

Seafood processing employment was responsible for the addition of 500 jobs during the month. The Southeast seafood processing industry is reaping the benefit of a very strong pink salmon run. Construction employment was the other main contributor in Southeast employment growth in August, climbing 4% over the month. This was the smallest percentage increase in construction since January indicating that the summer construction season is peaking.

Overall, government employment in Southeast remained at last month's level, but within the industry there was a shift of jobs from the state to the local sector. The gain in local government was due largely to growth in local education employment. It is unclear why state government employment contracted.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
SOUTHEAST ALASKA

				CHANGES FROM:	
	P/	*R/*			
	8/83	7/83	8/82	7/83	8/82
Nonag. Wage & Salary	32100	31500	32200	600	-100
Construction	2150	2050	2050	100	100
Manufacturing	6450	5950	6400	500	50
Food & Kindred Prod.	3600	3100	3400	500	200
Lumber & Paper Prod.	2650	2650	2750	0	-100
All Other Mfg.	200	200	250	0	-50
Trans. Comm. & Util.	2200	2250	2550	-50	-350
Trade	4550	4550	4650	0	-100
Wholesale Trade	400	400	400	0	0
Retail Trade	4150	4150	4250	0	-100
Finance-Ins. & R. Estate	1000	1000	1000	0	0
Mining, Svcs. & Misc.	4300	4250	4300	50	0
Government	11450	11450	11250	0	200
Federal	2550	2550	2450	0	100
State	5400	5550	5250	-150	150
Local	3500	3350	3550	150	-50

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HOURS AND EARNINGS

By Kathryn Lizik

July average hours and earnings increased in all industries except manufacturing. Although average weekly hours in food and kindred products jumped 14% over June due to the strong July salmon run, average hourly earnings declined. Earnings declined due to a very large increase in temporary, lower-paid employees hired during the peak of the season.

ALASKA
HOURS AND EARNINGS FOR SELECTED INDUSTRIES 1/ 2/

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	p/ 7/83	r/ 6/83	7/82	p/ 7/83	r/ 6/83	7/82	p/ 7/83	r/ 6/83	7/82
Mining	$24.44	$23.54	$21.78	51.7	50.3	53.6	$1263.55	$1184.06	$1167.41
Contract Construction 3/	24.18	23.23	24.03	44.6	43.6	45.8	1078.43	1012.83	1100.57
Manufacturing	10.44	12.58	10.17	41.6	38.1	42.6	434.30	479.30	433.24
Food & Kindred Products	8.08	8.70	8.24	41.2	36.1	43.6	332.90	314.07	359.26
Lumber & Paper Products	18.28	16.47	14.73	43.2	39.8	38.7	789.70	655.51	570.05
Trans. Comm. & Util.	16.28	15.62	15.11	39.8	38.3	38.9	647.94	598.25	587.78
Trade	10.26	10.14	9.74	35.8	35.8	35.6	367.31	363.01	346.74
Wholesale Trade	11.80	11.75	11.78	39.0	38.4	38.5	460.20	451.20	453.53
Retail Trade	9.63	9.46	8.87	34.6	34.8	34.5	333.20	329.21	306.02
Finance-Ins. & R. Estate	—	—	—	—	—	—	354.35	345.80	358.89

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor

2/ Excludes eating and drinking establishments

3/ Due to technical revision in construction sample, 1982 estimates are not strictly comparable to previous years data.

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.